# THE MYTHS AND JUSTIFICATIONS OF SEX SEGREGATION IN HIGHER EDUCATION: VMI AND THE CITADEL 

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## I. INTRODUCTION

One of the best indicators of equality in any society is access to education. ${ }^{1}$ Education not only provides the intellectual capital that has become increasingly important in a world in which skills determine life position, but also the opportunity to enter into networks of association with those similarly trained and positioned. Access to higher education, particularly to the specialized and elite education that is part of the tracking system leading to prestigious and highly remunerative positions, is a measure of equality. ${ }^{2}$ This article argues that segregated schooling for women limits their access to the same educational and associational opportunities men have, and that arguments supporting segregation are based on unsound criteria. It further argues that whatever the intent or ideological underpinning of such arguments, they ultimately have a negative outcome for women's equality in society.

The arguments offered in support of all-male or all-female educational institutions mask the larger issue of segregation as a means used to prevent women from controlling their lives and accessing formal and informal channels to equality. ${ }^{3}$ The power of these arguments is enhanced not only by support from those who wish to perpetuate men's advantages in society, ${ }^{4}$ but also by many people who claim to be devoted to women's equality. ${ }^{5}$

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## II. Falling Barriers

There is a relationship between an individual's inherited class and social position and her access to specialized and elite education, although even women of privilege historically have faced institutionalized barriers to their admission to elite institutions through both custom ${ }^{6}$ and law. ${ }^{7}$ The gap between those who have access to elite education and those who do not, however, has closed in modern times. ${ }^{8}$ Changes in law and changes in societal norms ${ }^{9}$ have made it possible for men and women of diverse social backgrounds to prepare for careers in business, sciences, the arts, and the professions to a greater extent than ever before. ${ }^{10}$ Both formal and informal barriers restricting the access of women have been lifted. ${ }^{11}$ As a result, the most elite educational institutions in the United

Faye Crosby et al., Taking Selectivity into Account, How Much Does Gender Composition Matter?: A ReAnalysis of M.E. Tidball's Research, 6 NWSA J. 107, 108 (1994) (challenging Tidball's claim that women who graduate from women's colleges accomplish more than women who graduate from coeducational colleges).
6. See Edward H. Clarke, Sex in Education: Or, a Fair Chance for the Girls 127, 21-118 (1873) ("Identical education of the sexes is a crime before God and humanity that physiology protests against, and that experience weeps over."). In the book, which became the leading authority for the foes of coeducation, Clarke argued that colleges could not possibly afford to accommodate the biological needs of women because of the theoretical and clinical interference of menstruation on a classical education. See id.; see also Pierre Bourdieu, Distinction: A Social Critique of the JUDGEMENT OF TASTE 105 (1984) ("[O]ne sees the effect of the dispositions associated with gender," resulting in girls choosing more literary pursuits and boys choosing more scientific areas); JACOBS, supra note 1, at 58 ("For many years . . . entry into many elite schools was prohibited to women . . . [especially] in postgraduate education, where until recently law school, medical school, and business school education were severely limited for women.").
7. Title IX of the Education Amendments of 1972, Pub. L. No. 92-318, 86 Stat. 374 (codified as amended in 20 U.S.C. $\S \S 1681-88$ and scattered sections of 29 U.S.C. and 42 U.S.C. (1994) is one example of a relatively new statute intended to lessen the barriers women face in education.
8. See LORRAINE DUSKY, STILL UNEQUAL 10 (1996) (noting that today, women account for $43 \%$ of law students, up from four percent 30 years ago); see also JACOBS, supra note 1, at 58 ("[U]ntil recently, law school, medical school, and business school education were severely limited for women. Today controls are more likely to be informal . . . " "); MARy ROTH WALSH, "DOctors WANTED: NO WOMEN NEED APPLY" 268 (1977) (noting that the number of female students entering medical school increased more than $700 \%$ between 1959 and 1976).

Federal statistics show that college enrollment increased by $69 \%$ between 1970-92. BUREAU of the Census, U.S. Dep't of Com., Statistical Abstract of the United States: 1996 (116th ed. 1996) 153 tbl.231, 158 tbl.240, 180 tbl. 280 (1996) [hereinafter STATISTICAL AbSTRACT]. Much of this increase was due to the enrollment of part-time and female students. See id. Female students' college enrollment increased $143 \%$ from 1970-92, and part-time student enrollment increased $19 \%$ from 1983-93. See id.
9. See EPSTEIN, supra note 3, at 5 ("Only with shifts in power, the entry of women into the scientific establishment, and their political mobilization have women been able to challenge the mainstream models promulgated in the institutions of society . . .").
10. From 1978-92, college enrollment of blacks increased from 1.03 million to 1.39 million; enrollment of whites increased from 9.19 million to 10.87 million; enrollment of Hispanics increased from 417,000 to 1.06 million; enrollment of Native Americans increased from 77,900 to 127,800; and enrollment of Asian Americans increased from 235,100 to 773,900. See Statistical AbSTRACT, supra note 8 , at 181 tbl. 281.
11. During the 1960s and 1970s almost all elite private colleges, including those in the Ivy League, opened their doors to women. See Barnard/Columbia Women's Handbook Collective, The Barnard/Columbia Women's Handbook iii-v (1992) (on file with the Duke Journal of Gender Law $\mathcal{E}$ Policy) [hereinafter B-C WOMEn's HandBOOK] The notable exception is Columbia College, which remained all-male until 1983. See id. Yale and Princeton became coeducational in 1969, fol-

States have increased greatly the enrollment numbers of these individuals who formerly constituted a small minority or were entirely absent. ${ }^{12}$ To further increase female enrollment, many institutions of higher learning specializing in the sciences and engineering, like Purdue University and Virginia Polytechnic Institute, in which women had been virtually invisible, sought ways of encouraging the recruitment and retention of female students. The outcome of these changes in education is reflected in the proportion of women who have entered business, the professions, and the sciences and have established careers within these fields. ${ }^{13}$

The integration of women into institutions long regarded as the domain of men has met with resistance, and there are those who hope the institutions return to their former exclusionary practices. ${ }^{14}$ Until July 1996, two publicly supported state colleges, the Virginia Military Institute (VMI) and The Citadel, refused to admit women. ${ }^{15}$ These two institutions were the last remaining state supported schools to prohibit women from admission; ${ }^{16}$ the United States Military Academy, the United States Naval Academy, and the United States Air Force Academy, which also are publicly supported military institutions, began admitting women in $1976 .{ }^{17}$
lowed in 1972 by Brown and Dartmouth, and Harvard in 1976. See id.; cf. COMM. ON WOMEN IN Science and Eng'g, Nat'l Res. Council, Science and Engineering Programs: On Target for WOMEN? (Marsha Lakes Matyas \& Linda Skidmore Dix eds., 1992) (discussing strategies for increasing the participation of women in scientific and engineering careers in order to achieve education, economic, and occupation equity).
12. Out of 255,000 students enrolled in professional school (for their first professional degree) in 1978, 10.1\% were non-white. See Statistical Abstract, supra note 8, at 181 tbl.281. By 1992, the percentage of non-white students enrolled had more than doubled. See id.
13. In 1970, men with four years or more of college education comprised $15.7 \%$ and women $11.2 \%$ of the civilian labor force; by 1991, the number of men had increased to $27.6 \%$ and women had reached $25.2 \%$. See Statistical Abstract, supra note 8, at 395, tbl.617. In law, women constituted less than $4 \%$ of the profession up until the 1960s. See Cynthia Fuchs Epstein, Women in Law 4 (2d ed. 1993). By 1995, women constituted $26.4 \%$ of lawyers. See STATISTICAL ABSTRACT, supra note 8 , at 405 tbl.637. Furthermore, women comprised approximately $52.6 \%$ of the students in graduate school in 1994. See id. at 182 tbl.283. In 1983, nearly $41 \%$ of all people in managerial and professional specialties were women; by 1995, that number had increased to $48 \%$. See id. at 405 tbl. 637.
14. See Faulkner v. Jones, 10 F.3d 226, 234 (4th Cir. 1993) (Hall, J., concurring) (noting that The Citadel's all-male tradition "not only practices inequality, but celebrates it."); Mike Allen, Defiant V.M.I. to Admit Women, But Will Not Ease Rules for Them, N.Y. Times, Sept. 22, 1996, at A1, 36 ("The very idea of women in the ranks . . . had galled most cadets and alumni.").
15. The Citadel's undergraduate program was made available only to men; it did, however, admit women to its evening and graduate programs. See Faulkner, 10 F.3d at 229.
16. See 2 Soldiers' Daughters to Enter Citadel, N.Y. Times, Aug. 5, 1996, at A9 ("[Aside from VMI] The Citadel ... [is] the only other state-financed all-male college in the nation . . . ."); Valorie K. Vojdik, At War: Narrative Tactics in The Citadel and VMI Litigation, 19 HARV. WOMEN's L.J. 1, 1 (1996).
17. United States v. Virginia, 116 S. Ct. 2264, 2293 (1996) (Scalia, J., dissenting) [hereinafter VMI $V]$.

VMI and The Citadel offer military-style training, ${ }^{18}$ as well as education in engineering, the sciences, and the liberal arts. ${ }^{19}$ Both schools are venerated institutions in their respective states. ${ }^{20}$ These institutions are bastions of tradition that revere their historic pasts, including their male-only status. ${ }^{21}$ Students at these institutions bond and develop the quintessential "old boy" ties that follow them through life, enabling the men to become integrated into vigorous alumni networks that provide access to important positions in the professions and government. ${ }^{22}$

In 1990, however, prompted by a complaint filed with the Attorney General of the United States by a female high school student seeking admission to VMI, the federal Department of Justice brought suit against the Commonwealth of Virginia and VMI alleging a violation of the Equal Protection Clause ${ }^{23}$ in maintaining a publicly funded military college exclusively for males. ${ }^{24}$ A female seeking admission to The Citadel brought suit against that institution on similar grounds soon after. ${ }^{25}$ Each school, under court mandate, ${ }^{26}$ attempted to cure its violation by creating "leadership" training programs for women at Mary Baldwin College in Virginia ${ }^{27}$ and Converse College in South Carolina. ${ }^{28}$ VMI and The Citadel claimed these programs for women were comparable to, although not the same as, what they offered men. ${ }^{29}$ The Supreme Court, however, disa-
18. See id. at 2270 (noting that in contrast to the federal service academies, VMI's program is "directed at preparation for both military and civilian life [because] . . . [o]nly about $15 \%$ of VMI cadets enter career military service.") (citations omitted); see also Faulkner, 10 F.3d at 229.
19. See VMI V, 116 S. Ct. at 2270; Faulkner v. Jones, 858 F. Supp. 552, 557 (D.S.C. 1994), aff'd in part, modified in part, 51 F.3d 440 (4th Cir.), cert. denied, 116 S. Ct. 352 (1995).
20. See VMI V, 116 S. Ct. at 2269 (noting that VMI provides leadership training not available anywhere else in Virginia, and that VMI "has the largest per-student endowment of all public undergraduate institutions in the Nation."); Faulkner, 10 F.3d at 236 (Hamilton, J., dissenting) (noting The Citadel's "150 years of impeccable tradition and distinguished service.").
21. See VMI V, 116 S. Ct. at 2269 (1996); Vojdik, supra note 16, at 12, 13-14; Valorie K. Vojdik, Girls' Schools After VMI: Do They Make the Grade?, 4 DUKe J. GENDER L. \& POL’Y 69, 73-74 (1997).
22. See Vojdik, supra note 16, at 1 ("Both institutions offer male cadets not only an undergraduate education in a military-style environment, but also access to power, wealth, and opportunity, particularly in the South. Legions of alumni have achieved positions of power in government, the military and business."). Some claim many of the bonds are developed because of the derisive treatment of new cadets by upperclassmen that forces recruits to band together in their common misery. See VMI V, 116 S . Ct. at 2270 ("[T]he rat line bonds new cadets to their fellow sufferers and, when they have completed the 7 -month experience, to their former tormentors.") (citations omitted).
23. U.S. CONST. amend. XIV, § 1 .
24. United States v. Virginia, 766 F. Supp. 1407, 1408 (W.D. Va. 1991), vacated, 976 F. 2 d 890 (4th Cir. 1992) [hereinafter VMI I].
25. See Faulkner, 858 F. Supp. 552.
26. United States v. Virginia, 976 F.2d 890, 900 (4th Cir. 1992) [hereinafter VMI II]; Faulkner, 858 F. Supp. at 568.
27. See VMI V, 116 S. Ct. at 2272.
28. See Amicus Brief of Nancy Mellette in Support of Petitioner at 7, VMI V, 116 S. Ct. 2264 (1996) (Nos. 94-1941, 94-2107) [hereinafter Mellette Brief].
29. See VMI V, 116 S. Ct. at 2272-73; Mellette Brief, supra note 28, at 7, VMI V, 116 S . Ct. 2264 (1996) (Nos. 94-1941, 94-2107); see also Vojdik, supra note 16, at 7 ("[C]reating non-military programs for women at Mary Baldwin and Converse Colleges supposedly does not segregate women, but reflects 'real' differences in the educational 'needs' of men and women.").
greed, holding that VMI was in violation of "the Constitution's equal protection guarantee . . . [by] reserving exclusively to men the unique educational opportunities VMI affords. ${ }^{130}$

## III. Strange Bedfellows

Whether the separate programs for women implemented by VMI and The Citadel were truly "equal" according to the Supreme Court's previous interpretations of the Fourteenth Amendment's Equal Protection Clause, ${ }^{31}$ whether they resulted in the same outcomes that privilege male graduates, and whether the discussion about the virtues and liabilities of educating men and women separately, or indeed of maintaining them in separate spheres has any rational basis, has been disputed widely. ${ }^{32}$ Even before the Supreme Court spoke on the issue, the dispute over federally supported single-sex education attracted national attention, with support for sex segregation drawing advocates who might not be expected to be on the same side of the issue. ${ }^{33}$ Those advocating a return to, or

[^1]continuation of, segregated patterns can be found among groups with very different ideologies and views of a just society. ${ }^{34}$ People wishing for segregated patterns to continue may be found among supporters of women's advancement and among conservative gatekeepers aimed at maintaining male privilege. Both of these groups argue that because of alleged biological, psychological, and sociological differences, men and women receive educational benefits from being educated separately. ${ }^{35}$ VMI used several of these arguments in defense of its male-only program. ${ }^{36}$ Although the Court found VMI in violation of the Equal Protection Clause, ${ }^{37}$ it declined to address the merits of the various arguments used to support VMI's claims about the benefits of single-sex education. ${ }^{38}$

Defenders of single-sex education base their views upon questionable assumptions about basic differences between the sexes and their allegedly different educational requirements. ${ }^{39}$ They use rhetorical strategies which attempt to validate these assumed differences for each sex. ${ }^{40}$ They confirm the stereotypes about gender differences by accepting, uncritically, the pseudo-scientific argu-

B1 (finding that a public school for girls in Harlem will likely face similar legal challenges under the Fourteenth Amendment's Equal Protection Clause that VMI faced).
34. Compare Edward O. Wilson, On Human Nature 129 (1978) ("The evidence for a genetic difference in behavior [between men and women] is varied and substantial. In general, girls are predisposed to be more intimately sociable and less physically venturesome [than boys]."), with Tidball, Baccalaureate Origins, supra note 5, at 394 and Tidball, Perspective, supra note 5, at 134.
35. See Vojdik, supra note 16, at 6 (outlining one of the biological arguments of the conservative gatekeepers: "[W]omen are more nurturing and concerned with relationships than men, who are concerned with formal rules and authority.") (citations omitted); see also JANET SAYERS, BIOLOGICAL Politics: Feminist and Anti-Feminist Perspectives (1982) (discussing the arguments for and against biology as a justification for single-sex education).

For authors arguing that the sexes should be separated in education settings based upon biological differences, see WILSON, supra note 34, at 147 (arguing that evolutionary history plays a key role in determining sexual discrimination and behavior in society); Lionel Tiger, The Possible Biological Origins of Sexual Discrimination, 10 ImPact SCI. SOC’y 29, 36 (1970) (arguing that biological factors are of prime importance in discussing maleness and femaleness, and that "particular bonds between males . . . are intrinsically related to political, economic, military, police and other similarly power-and-dominance-centered social subsystems, [and] that equal female colleagues-even onecould interfere with these bonding processes . . . .").

For a feminist perspective on some of the biological arguments, see NANCY CHODOROW, The Reproduction of Mothering: Psychoanalysis and the Sociology of Gender (1978) (arguing that women's sense of connectivity and relational ways of knowing stem from their reproductive abilities and their early childhood psychological development).
36. See sources cited supra note 33.
37. U.S. CONST. amend. XIV, § 1 .
38. See VMI V, 116 S . Ct. at 2276-77 ("[S]ingle-sex education affords pedagogical benefits to at least some students . . and that reality is uncontested in this litigation."). The Court limited the scope of its ruling by tailoring its comments to the specific facts regarding VMI and VWIL: "[W]e rule here that Virginia has not shown substantial equality in the separate educational opportunities the State supports at VWIL and VMI." Id. at 2286.
39. See Brief Amici Curiae in Support of Petitioner by the American Association of University Professors et al. at 4-15, VMI V, 116 S. Ct. 2264 (1996) (No. 94-1941) [hereinafter AAUP Brief]. A few of the expert witnesses who advocated segregation on the basis of sex have expertise in fields only loosely connected to the issue, but have nevertheless done studies on differences between the sexes. Elizabeth Fox-Genovese, for example, is an eminent historian, not a social scientist. See id. at 9. David Riesman, a sociologist, does not seem to be aware of the wealth of studies on sex differences. See id. at 7-8.
40. See id at 10-15.
ments and oversimplified interpretations of scientific data about women's and men's "nature." ${ }^{41}$ Some of those who argue for segregated education refer to the discriminatory treatment of women in mixed-sex environments. This argument, however, relies upon the assumption that discrimination cannot be remedied in the mixed-sex setting. Many social science studies do not support the idea that deep-rooted male and female natures require separate education, or that segregated education can provide members of each sex with the same opportunities and development of skills. ${ }^{42}$

## IV. JUSTIFICATIONS OfFERED FOR THE MAINTENANCE OF SINGLE-SEX EdUCATION

The justifications offered for the maintenance of sex segregated institutions include the physiological and psychological differences between men and women (with some emphasis on assumed differences in self-esteem); ${ }^{43}$ the benefits to women of learning in an all-female environment; ${ }^{44}$ the consequences of discrimination against women in mixed-sex institutions; ${ }^{45}$ the complications of

[^2]The Citadel defendants asserted that: College age women have less self-confidence than most college age men. There is biological-neurological evidence showing that adolescent males tend toward more impulsive and risk-taking behavior than females and therefore need a more structured learning environment. [M]en generally like and need a competitive atmosphere more than women.
Vojdik, supra note 16, at 6 n .38 (citations omitted).
44. See Tidball, Perspective, supra note 5, at 130-35 (discussing the benefits to women of learning in an all-female environment).
45. For the consequences of discrimination against women in mixed-sex institutions, see Lee et al., supra note 32, at 114 ("[T]he coeducational environment has not brought about the equal treatment of males and females that was trumpeted by its early advocates."); Tidball, Perspective, supra note 5, at 132-33.
sexual attraction between males and females in mixed-sex institutions; ${ }^{46}$ and the preservation of segregation as an interest of the State in "diversity." ${ }^{47}$

## A. Physiological and Psychological Differences

VMI sought to justify its single-sex status by relying on testimony stating that "women are physically weaker, that they are more emotional and cannot take stress as well as men;"48 that they are less motivated by aggressiveness and suffer from fear of failure; ${ }^{49}$ and that more than a hundred physiological differences contribute to a "natural hierarchy" in which women cannot compete with men. ${ }^{50}$ 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." ${ }^{51}$ Other witnesses testified to "men and women's 'different way of knowing,'" and "women's ethic of caring," as opposed to "men's ethic of justice." ${ }^{52}$ These "characteristics" lead, it was argued, to a natural hierarchy in which women cannot compete with men. ${ }^{53}$

With regard to the kind of education offered at VMI, proponents contended that the program met the unique "developmental needs of 'relatively undisciplined ${ }^{54}$ adolescent males who 'come in with [an] inflated sense of self-efficacy that must [be] knocked down" ${ }^{\prime 55}$ and that "we really don't need to beat upityness [sic] and aggression and all of that out of young women." ${ }^{56}$

Recent studies and assessments of the body of scholarly literature on cognitive differences between males and females with regard to math and verbal abilities show virtually no differences between the genders. ${ }^{57}$ There is not a con-

[^3]sensus among psychologists, however. For example, Alice Eagly, reacting to what she regarded as the current trend in her profession toward a dismissal of sex differences, claimed that a number of areas of study show significant differences between the sexes. ${ }^{58}$ She conceded, though, that "[c]onsiderable controversy surrounds the proper interpretation of [the studies] of cognitive abilities. ${ }^{159}$ For example, most of the studies were conducted by experimental psychologists using college-aged men and women as subjects. ${ }^{60}$ Psychologists Janet Sibley Hyde and Elizabeth Ashby Plant disagreed with Eagly's position, noting that twenty-five percent of studies measuring gender difference found a difference that was close to zero. ${ }^{61}$ They pointed out that if there has been a slant in the interpretation of test results, it has resulted from the glamorization and overemphasis on findings of gender difference; studies finding no differences have been paid scant attention. ${ }^{62}$

Even if there were considerable sex differences in populations of males and females in the various areas of abilities measured by psychologists, they are distributions rather than descriptions of mutually exclusive categories. ${ }^{63}$ Indeed, statistically significant differences may be found on the basis of a difference of only a few percentage points, but these differences are not socially significant. That is, they do not have consequences for women's or men's ability to function in society. The differences reported at the ends of distributions do not negate the
ence is so small that they can effectively be considered zero).
Studies of aggression and helping behavior show that gender differences depend upon the setting and social role prescriptions. See Marcia C. Linn \& Anne C. Petersen, Emergence and Characterization of Sex Differences in Spatial Ability: A Meta-Analysis 56 CHILD DEV. 1485-94 (1985) (examining the nature, magnitude, and age of first appearance of gender differences with regard to mathematics, science, and spatial ability, and concluding that there was no consistent pattern of gender differences between or within these ability areas). Indeed, mathematics, science, and spatial abilities were themselves shown not to be unitary ability domains independent of the issue of gender. See id.

For documentation on the disappearance of gender differences in cognitive ability, see Alan Feingold, Cognitive Gender Differences Are Disappearing, 43 AM. Psychologist 95 (1988).
58. See Alice H. Eagly, The Science and Politics of Comparing Women and Men, 50 Am. PsyCHOLOGIST 145 passim (1995). Eagly cites studies that show large differences in at least one test of cognitive ability (mental rotation), some social behaviors (facial expressions and frequency of filled pauses in speech), some sexual behaviors (incidence of masturbation and attitudes toward casual sexual intercourse), personality traits (tender-minded and nurturing tendencies), and some physical abilities. See id. at 151.
59. Id. at 147.
60. See id. ("Some research areas, especially those produced mainly by the experimental social psychologists, overrepresent samples of college students.").
61. See Janet Shibley Hyde \& Elizabeth Ashby Plant, Magnitude of Psychological Gender Differences: Another Side to the Story, 50 AM. Psychologist 159, 160 (1995).
62. Id. at 161 ("[T]he popular media . . glamorize and magnify findings of gender differences and are bored to tears with findings of no difference."); see also Janet Shibley Hyde, Can MetaAnalysis Make Feminist Transformations in Psychology?, 18 Psychol. Women Q. 451, 452 (1994) ("The media subscribe to the differences model and market it to the lay public."). See generally EPSTEIN, supra note 3 (discussing the methodology of recent studies on gender distinctions).
63. There are no studies of abilities that are not distributions; none show that men and women are mutually exclusive categories. See Eagly, supra note 58, at 151 ("It is thus important to note that even findings that are relatively large in the general domain of psychological findings produce distributions that substantially overlap .... [I]t would be accurate to describe sex differences and similarities as located along a continuum of magnitude . . . .").
fact that most males and females usually test the same. ${ }^{64}$ Furthermore, any differences reflected within a gender breakdown of each sex may be explained by varied experiences or individual backgrounds. ${ }^{65}$ Tests and experiments are snapshots at one point in time. Both males and females may change their capacities over the course of a lifetime, or even because of a change in circumstances. In addition, researchers believe that treating members of each sex differently, for example by encouraging girls to succeed in math, would result in different test scores. ${ }^{66}$ Academic abilities can be fostered in a facilitating environment, and can be diminished in others. ${ }^{67}$

Many supporters of sex-segregated institutions, however, claim that females and males achieve more when they attend single-sex schools. ${ }^{68}$ In their view, segregation contributes to young men's and women's learning and assumption of leadership roles. ${ }^{69}$ Those who focus on males argue that men might be distracted by women and become competitive with each other in an attempt to attract female approval, thereby diminishing the male bonding possibilities. ${ }^{70}$ There does not seem to be research support for this perspective, although, as discussed below, sociologist David Riesman supported sex segregation based on the notion that sexual attraction is an impediment to learning. ${ }^{71}$

Those who focus on women argue that teachers regard male students more highly than female students and favor them by, among other things, calling on them more in class. ${ }^{72}$ The proponents of single-sex education who focus on women also argue that males are more aggressive in seeking attention and attaining leadership positions. ${ }^{73}$ Advocates for segregated schools, however, seem to assume that the poor treatment women suffer in mixed-sex situations is im-

[^4]mutable. ${ }^{74}$ Energy, therefore, is not directed toward improving the way in which women are treated by their teachers and peers, but rather toward the removal of women from the hostile environment. ${ }^{75} \mathrm{Or}$, as in the cases of VMI and The Citadel, the focus is directed toward the threat women in the classroom pose to the culture of symbolic "hyper-masculinity." ${ }^{.76}$ Little or no consideration is given to the possible negative effects on students of the single-sex educational culture, ${ }^{71}$ or to preparing men to live and work in a world that is increasingly integrated by sex. ${ }^{78}$

## B. Self-Esteem

Proponents of single-sex schools argue that while men enter all-male institutions with high self-esteem that must be undercut to permit later bonding, ${ }^{79}$ all-female institutions help build self-esteem for women. ${ }^{80}$ The research on selfesteem, however, is quite contradictory. There are numerous studies measuring self-esteem according to a number of variables, such as body image, various personality dimensions, ratings on indices of masculinity and femininity, agentic and communal behavior traits, and other factors. ${ }^{81}$ Some show similar rates of self-esteem between men and women, ${ }^{82}$ others show some differences. ${ }^{83}$ Many

[^5]which show differences according to sex are mitigated by other factors, such as whether women are employed. ${ }^{84}$

Even if women were to have lower average self-esteem scores than men, it does not necessarily follow that they would do worse in school or later in life. In fact, old "fear of success" studies done by Matina Horner ${ }^{85}$ showing that women had a greater fear of success than men have not been consistent. ${ }^{86}$

The focus on self-esteem or efficacy as an important variable, therefore, is misplaced. It is entirely possible that self-esteem can come from having an adoring mother, a car in a car culture, or the right brand of sneakers. High selfesteem may give a person confidence, but unless one has access to an open opportunity track, connections with mentors, and the ability to acquire special skills, success is not necessarily guaranteed.

## C. Value of Single-Sex Education for Women

Administrators and supporters of VMI and The Citadel compared the relative success of women who had attended women's colleges with the achievements of women who had attended coeducational institutions to support their claims for single-sex education. ${ }^{87}$ They offered evidence that suggested a greater proportion of women who had attended sex-segregated schools, as compared with the proportion of those who had attended coeducational institutions, became heads of organizations or top managers, or went on to medical schools. ${ }^{88}$
83. When the relationship between participation and involvement in school activities, degree of part-time work, and self-esteem in 209 male and 233 female middle-class urban high school sophomores and juniors was investigated, results indicated that self-esteem was affected by both the nature of the school activity and by gender. See Jean A. Steitz \& Tulita P. Owen, School Activities and Work: Effects on Adolescent Self-Esteem, 27 Adolescence 37, 46-48 (1992). When 101 girls and 100 boys ages 14-16 were tested on self-esteem, "girls reported significantly more problems and lower levels of self-esteem than did boys." Juliet F. Harper \& Elizabeth Marshall, Adolescents' Problems and Their Relationship to Self-Esteem, 26 ADOLESCENCE 799, 799, 804-07 (1991). Forty-eight males and 70 females in grades 7-11 were tested on self-esteem, depression, social support, and social stress. The results demonstrated that "social stress was strongly correlated with higher depression and lower self-esteem scores" for women, but not for men. See Patricia B. Moran \& John Eckenrode, Gender Differences in the Costs and Benefits of Peer Relationships During Adolescence, 6 J. ADOLESCENT Res. 396, 396 (1991).
84. For example, a study of 462 young adult women and 192 young adult men, ages 17-23, found that vocational status was a critical factor affecting the self-esteem of young adult women. See Judith A. Stein et al., The Relative Influence of Vocational Behavior and Family Involvement on Self Esteem: Longitudinal Analyses of Young Adult Women and Men, 36 J. Vocational Behav. 320, 320, 335 (1990). Women attending school or engaged in full-time jobs had higher self-esteem than women with parttime jobs or no jobs, regardless of marital status or parenthood. See id.
85. See Matina S. Horner, Femininity and Successful Achievement: A Basic Inconsistency, in Feminine Personality and Conflict 45 (J.M. Bardwick et al. eds., 1970) (reporting data that women have a higher fear of success than men).
86. See Martha T. Mednick, Fear of Success, in 1 Women's Studies Encyclopedia 132-33 (Helen Tierney ed., 1989) ("As a scientific concept, [fear of success] is now shaky."); see also N.T. Feather \& J.G. Simon, Fear of Success and Causal Attribution for Outcome, 41 J. Personality 525, 536-42 (1973) (contradicting Horner's results in a study that found the proportions of fear of success stories written by males and females were respectively higher and lower than the corresponding proportions reported by Horner).
87. See Mary Baldwin Brief, supra note 80, at 15-17.
88. See id.

Yet because of the way in which these studies were conducted, ${ }^{89}$ and because of the historical period in which they occurred, ${ }^{90}$ the resultant data cannot be relied upon to assert that segregated education today would necessarily produce successful women. There are several reasons why this data is unreliable today. First, many more women attended women's colleges in the past. ${ }^{91}$ As late as 1960, there were about 300 women's colleges; in 1995 there were only eighty-four. ${ }^{92}$ Second, the criteria used to define success are suspect. In studies conducted by Elizabeth Tidball and her associates, which are regarded as the basic source for establishing a relationship between success and attendance at women's colleges, success was measured by being named in Who's Who of American Women. ${ }^{93}$ The number of women who became top officials, managers, political leaders, and business executives was so small that it is impossible to make any generalizations about their career routes. ${ }^{94}$ In addition, at the time of the Tidball study, women were excluded from the undergraduate institutions at most Ivy League schools, ${ }^{95}$ so there were few comparable coeducational institutions with which to compare the single-sex educational experience.

For the tiny number of women from single-sex colleges who did succeed in public life, some educated guesses can be ventured about the possible "causes" of their success. These might include such factors as the strength of the networks among the graduates of elite women's colleges, their social class or background, and the clout of their fathers or husbands. For example, before the 1980s, female senators and governors were often the widows or daughters of men who had previously held those offices. ${ }^{96}$ It is also possible that women who attended women's colleges were more likely to think highly of themselves before entering college. ${ }^{97}$

Small, selective, coeducational institutions, where teaching is placed at a premium, are known to achieve the same or better results for women as singlesex women's colleges. ${ }^{98}$ Recent research suggests that coeducational schools to-

[^6]day are as likely to produce female scientists as are women's colleges. ${ }^{99}$ Faye Crosby noted that the National Center for Education Statistics for 1985 showed that coeducational colleges actually had a slight advantage over women's colleges in the percentage of bachelor's degrees awarded in engineering, mathematics, and the physical sciences to women. ${ }^{100}$ The percentage of all graduating women with these degrees was five, while the percentage of women graduating from women's colleges was four. ${ }^{10}$

Similarly, recent research by Gwen Moore and Deborah White, using a national sample of elite women in business and politics, showed that women who are business executives or who have been elected to office have had a variety of educational experiences. ${ }^{102}$ The majority, however, were graduates of coeducational undergraduate institutions. ${ }^{103}$ Moore and White suggested that " $[\mathrm{t}] \mathrm{he}$ few women who achieved top positions may be those who are comfortable in informal male-centered networks . . . ${ }^{1104}$ The women in high-level government posts, compared to the general population, were "older, more highly educated, and from more privileged social origins. ${ }^{1105}$

Even if there were meaningful statistics showing that a disproportionate number of female "achievers" came from women's colleges, there is no reason to assume the sexual composition of the school was the key to their success. ${ }^{106}$ Sin-gle-factor explanations are suspect due to the invisible power of confounding variables. ${ }^{107}$ In the past, educated women rarely ran for office or became top executives, doctors, or lawyers, ${ }^{108}$ but this is not to say that they did not form a pool of intelligent, educated, and well-situated women who were available to take advantage when the doors of opportunity were finally thrown open to them. For example, most female attorneys practicing in the United States today received their law degrees after 1975, when law schools finally began to admit women. ${ }^{109}$

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## D. Sexuality

Administrators at VMI and The Citadel argued that the presence of women would undermine the learning and bonding of men who attend these institutions. ${ }^{110}$ This "distraction" caused by the attraction between women and men was used to justify segregation. ${ }^{111}$ Sociologist David Riesman, who testified on behalf of VMI, alleged that the dizzying component of sexuality in the postpuberty years impedes the learning process and is best eliminated through segregation of the sexes. He did not, however, discuss the fact that sexuality is part of social life and plays into most interactions between men and women. ${ }^{112}$

Female sexuality historically has been used to justify limiting the participation of women in all aspects of public life. ${ }^{113}$ Yet men do not regard women as sexual distractions when they are in subordinate roles, such as a secretary for a male manager or a nurse for a male doctor. ${ }^{114}$ The "threat" of sexuality is usually invoked by gatekeepers when the hierarchy is about to be disturbed. ${ }^{115}$

In any case, removing the person of the opposite sex does not mean that an environment becomes desexualized. It is well known that single-sex institutions are alive with same-sex sexuality. ${ }^{116}$ In addition, at single-sex institutions there are constant references to the opposite sex in disparaging and tawdry ways. ${ }^{117}$
110. See VMI V, 116 S . Ct. at 2268 (stating that VMI's program "cannot be made available, unmodified, to women, and that alterations to accommodate women would necessarily be so drastic as to destroy" the program); see also Vojdik, supra note 16, at 6-7.
111. See VMI I, 766 F. Supp. at 1435 (stating that men at all-male schools "benefit from being able to focus exclusively on the work at hand, without the intrusion of any sexual tension.") (citations omitted); see also Faludi, supra note 70, at 64-65 (quoting a cadet as stating "if a girl was here, I'd be concerned not to look foolish. If you're a shy student, you won't be as inhibited [if no women are present].").
112. See VMI I, 766 F. Supp. at 1435; see also Elizabeth Fox-Genovese, The Citadel Case: Save the Males?, NAT'L REV., Aug. 1, 1994, at 51 (men and women "definitely follow different patterns of hormonal development . . . . Coeducational campuses ... amply confirm the prevalence of these conflicting patterns-with sometimes ridiculous, sometime repressive, and sometimes tragic results for all concerned.").
113. See AAUP Brief, supra note 39, at 4 (discussing the view that physiological differences contribute to a "natural hierarchy" in which women cannot compete with men); see also R.C. LEWONTIN et al., Not in Our Genes: Biology, Ideology, and Human Nature 4 (1984) (stating that biology is unchangeable, illustrated with an interview given by the British Minister for Social Services in 1980 about working mothers: "Quite frankly, I don't think mothers have the same right to work as fathers. If the Lord had intended us to have equal rights to go to work, he wouldn't have created men and women. These are biological facts, young children do depend on their mothers.") (emphasis omitted).
114. Cf. WALSH, supra note 8, at 142-43 (noting that an 1884 edition of the Women's Journal reported that nurses pose no threat to doctors and that "[n]urses are docile, submissive, and keep their proper place, while once let a woman study medicine and she thinks her opinion is as good as a man's.") (emphasis omitted).
115. See id. at xii (discussing barriers to women in the medical profession).
116. See, e.g., Faludi, supra note 70, at 81 (discussing homosexuality as part of the culture of The Citadel).
117. See, e.g., Lee et al., supra note 32, at 113-14 (finding that the severest form of sexism occurred at boys' schools); Faludi, supra note 70, at 64 (discussing how a cadet at The Citadel acknowledged that most of the students are "misogynistic," and frequently refer to females as "pigs" and "sluts.").

## E. Diversity

VMI and The Citadel attempted to use the diversity argument to maintain their all-male admission policies. ${ }^{118}$ The schools argued that single-sex education fulfills an important state purpose, and that a state should be allowed to allocate its educational resources to the majority's advantage, especially in light of limited funds and the recognized benefits of single-sex education. ${ }^{119}$ They claimed that the methodology used at VMI and The Citadel "could not be made available, unmodified, to women. ${ }^{1120}$ If admitted, women would destroy these colleges and their unique traditions and opportunities for men. ${ }^{121}$ Elizabeth FoxGenovese, an historian who served as an expert witness on behalf of VMI and The Citadel, stated that by providing opportunities for women, the schools would no longer have the diversity of being an all-male school. ${ }^{122}$

Both VMI and The Citadel glorified the camaraderie among cadets that is engendered by what they call "adversative" training. ${ }^{123}$ The logic behind this brutality is similar to that of fraternity hazing. As one witness explained, "my husband ... 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. ${ }^{\prime 124}$ The schools regarded the admission of women into their institutions as necessarily changing this culture that emphasizes malebonding, in part because of the perceived female need for privacy, differences in the physical training programs, and resulting changes in culture within the barracks. ${ }^{125}$ Although most of the men conform to a formal code of chivalry for public occasions, there is a contempt for women in general, and especially for women who are not members of their social circles. ${ }^{126}$ Within the barracks, women often are referred to in the most derisive ways. ${ }^{127}$ Even the president of VMI likened the introduction of women to the school as "a toxic kind of virus." ${ }^{128}$

A more "benign" justification for the maintenance of single-sex education was made by Fox-Genovese, who argued that choice for some means no choice

[^8]for others. ${ }^{129}$ She asserted that permitting women to attend all-male schools precluded everyone from attending publicly supported single-sex educational institutions if they so desired. ${ }^{130}$ Fox-Genovese stated that "[r]adical individualism more often than not ends by producing draconian regimentation. ${ }^{1131}$ In an article on The Citadel case, she also wrote that the state supported military schools provided opportunities not only to the:
[S]ons of its own graduates, but it is also demonstrably educating talented young men who might well end in disaster and despair without it. And in educating them, it provides models of accomplishment and ambition to countless other young men of modest background.

In this perspective, it is worth pondering the irony that, were The Citadel to admit women, it would expand its sexual diversity while reducing its diversity by class and perhaps race. ${ }^{132}$

Fox-Genovese came to this conclusion by noting that even though the lone woman admitted to The Citadel had higher entrance exam scores than an African American student, the woman's selfish desire for equal treatment "deprive[d] all the individuals who want men's single-gender education of their choice. ${ }^{11}$

This convoluted way of thinking about diversity, through maintaining a regressive and restrictive code, demonstrates how the terms and ideologies most often used to argue for a more diverse student body can be manipulated to support the arguments for the continuing legality of single-sex institutions. ${ }^{134}$

## V. CONCLUSION

Rebutting myriad stereotypes and assumptions regarding the cause and effect relationships between single-sex education and the development of civic virtues and cognitive abilities could extend to the entire range of sex and gender scholarship. But rebutting this or that datum circumvents the most important is-sue-addressing the cultural assumptions and expectations created by segregation.

Sex segregation in any social institution has overwhelmingly destructive consequences for women. It reinforces the disadvantages women face when they attempt to gain access to the opportunities and networks of association that are available to men. In other institutions, actual or symbolic segregation leads to invidious distinctions and to subordination of women. ${ }^{135}$ Society and sub-groups within society, invests heavily in the maintenance of distinctions between men

[^9]and women, probably because the practice supports male privilege. ${ }^{136}$ Far from relying on what are claimed to be the natural and obvious differences between the sexes, society employs laws, rules, and social codes to create sexually divided educational, political, and social spheres. ${ }^{137}$ Women who are persuaded that they are different may think less highly of themselves and may not aspire to a life of accomplishment. ${ }^{138}$ Stereotyping sometimes leads to a self-fulfilling prophecy. ${ }^{139}$ In segregated settings, there is the danger that women may think more highly of men without the reality check of seeing men in natural surroundings. Without regular contact in early schooling, men and women may easily categorize and stereotype each other and be ill-prepared for the public life in which they will need to interact. The few advantages women receive from the social assignments that confine, isolate, and shelter them are no consolation for the overwhelming disadvantages they suffer from being designated second-class citizens.

The arguments offered by VMI, The Citadel, spokespeople for many of the women's colleges, advocates of separate-sex education in public schools, and other segregated institutions show that even though women have demonstrated their ability to think, learn, and pursue high-powered careers and a wide range of other social roles, it is still acceptable to define them unilaterally, stereotypically, and ideologically. By referring to fictions masquerading as facts, by simplistically and irresponsibly regarding men and women as having distinct traits, and by denying the extraordinary diversity within each category of men and women, stereotypes are perpetuated. The arguments of VMI and The Citadel do not acknowledge the enormous social changes which have taken place for both women and men. Some of those who intend to stop the clock or turn it backward boldly maintain their institutional self-interests; many others, socialized as they are in the myths of the culture, do so unwittingly, and with the best of intentions.

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[^0]:    * Distinguished Professor of Sociology, Graduate Center, City University of New York. The research assistance of Elizabeth Wissinger is acknowledged with appreciation.

    1. See Jerry Jacobs, Revolving Doors: Sex Segregation and Women's Careers 38 (1989) (stating that "by all accounts, education is a central means of maintaining socioeconomic advantage.").
    2. See id. at 39 ("[T]he importance of education in attaining high-status occupations in industrial society is widely recognized.").
    3. Cf. Cynthia Fuchs Epstein, Deceptive Distinctions: Sex, Gender, and the Social Order 149 (1988) (citing arguments opposing coeducation); MIRIAM M. JOHNSON, STRONG MOTHERS, WEAK Wives: The Search for Gender Equality 4, 71-95, 128-85 (1988) (arguing that males tend to be more concerned than females with preserving gender distinctions and male superiority, and that those male tendencies are more likely to develop in separate male groupings).
    4. See JOHNSON, supra note 3.
    5. See, e.g., M. Elizabeth Tidball, Baccalaureate Origins of Entrants into American Medical Schools, 56 J. Higher Educ. 385, 394 (1985) (finding that while women attending selected women's colleges have the same average Scholastic Aptitude Test (SAT) scores as women at selected private universities with affiliated medical schools, the medical school entry rate for women from the women's colleges was more than twice as great); M. Elizabeth Tidball, Perspective on Academic Women and Affirmative Action, 1973 EDUC. REC. 130, 135 (finding that women's colleges with high women faculty-to-student ratios provide the most beneficial educational conditions for female students). But see
[^1]:    30. VMI V, 116 S. Ct. at 2269; see also The High Court Rejects Sex Bias, N.Y. TimES, June 28, 1996, at A32.
    31. See Mississippi Univ. for Women v. Hogan, 458 U.S. 718, 723-24 (1982) (explaining that statutes that classify on the basis of gender will only be upheld if the classification "serves 'important governmental objectives . . [that are] substantially related to the achievement of those objectives'") (quoting Wengler v. Druggists Mutual Ins. Co., 446 U.S. 142, 150 (1980)); Frontiero v. Richardson, 411 U.S. 677, 688 (1973) (holding that if the statutory objective is to exclude members of one gender because they are presumed to be innately inferior, the objective itself is illegitimate).
    32. For pertinent discussions of whether there is a rational basis for separate spheres for the sexes in education, see Crosby et al., supra note 5, at 114-15 (challenging research showing that women's colleges produce more female achievers than coeducational institutions); Valerie E. Lee et al., Sexism in Single-Sex and Coeducational Independent Secondary School Classrooms, 67 Soc. Educ. 92, 103-04 (1994) (examining sexism in schools and concluding that all schools had roughly the same incidence of sexism, yet gender reinforcement and embedded discrimination were more common in single-sex schools, and gender domination and active discrimination specifically against females were common in coeducational schools); cf. Jere Longman, How the Women Won, N.Y. Times, § 6 (Magazine), June 23, 1996, at 23 (examining the exclusion of women from most strenuous running events for most of the history of the modern Olympic games, because "common wisdom held that a woman was not physiologically capable of running mile after mile; that she wouldn't be able to bear children; that her uterus would fall out; that she might grow a mustache; that she was a man, or else wanted to be one.").
    33. See Vojdik, supra note 16, at 5 . She wrote:

    The Citadel and VMI . . . conflated these unique military colleges with women's colleges and, in a sleight of hand, relied upon research from women's colleges and secondary schools to argue that "single-gender" colleges benefit men and women .... [T]he expert witnesses for both defendants cited outdated studies of women's schools and colleges to justify the historical exclusion of women from the unique military education offered at The Citadel and VMI.
    Id. (footnote omitted); see also Anita K. Blair, Separate and Equal, N.Y. TiMES, Nov. 20, 1995, at A15 (stating that the 26 all-female schools who filed an amicus brief asking the Supreme Court to force VMI to admit women were jeopardizing their own futures as single-gender institutions); Susan Estrich, For Girls' Schools and Women's Colleges, Separate is Better, N.Y. Times, May 22, 1994, § 6 (Magazine), at 38 (supporting single-sex classrooms and schools for women because of the disparate treatment of women in coeducational settings); Kate Kruschwitz \& Carolyn McClintock Peter, AllGirl Settings for Teaching Math and Science, EdUc. DIG., Feb. 1995, at 60 (examining the methods employed in girls' schools heralded for their success in teaching girls math and science); Mary B.W. Tabor, Planners of a New Public School for Girls Look to Two Other Cities, N.Y. Times, July 22, 1996, at

[^2]:    41. See discussion infra notes $48-56$ and accompanying text.
    42. See infra notes $57-71$ and accompanying text; cf. Alice Eagly, Sex Differences in Social Behavior: A Social-Role Interpretation (1987); Epstein, supra note 3, at 81 (pointing out that researchers have found that "sex has not been a consistently powerful predictor [of behavior]. When sex differences are found, the determinants of the behavior are likely not to have been identified."); Eleanor Emmons Maccoby \& Carol Nagy Jacklin, The Psychology of Sex Differences 366-68 (1974) (discussing a review of attempts to match instruction techniques to aptitudes of specific groups of students, which shows that there is no evidence that an individual learns better if a program is geared to his or her area of strength); Kay Deaux, From Individual Differences to Social Categories: Analysis of a Decade's Research on Gender, 39 Am. Psychologist 105, 108 (1984) ("[W]hen any particular behavior is considered, differences between males and females may be of relatively little consequence.").
    43. See AAUP Brief, supra note 39, at 4-10; see also VMI II, 976 F.2d at 897 (holding that the United States' argument "might lead, if accepted, to a finding that would impose a conformity that common experience rejects. Men and women are different, and our knowledge about the differences, physiological and psychological, is becoming increasingly more sophisticated."); Daniel F. Kysor, Transitioning From Single-Sex to Coeducational High School: A Study Exploring the Effects on Self-Concept Using the Self Description Questionnaire II, Presentation Before the Annual Meeting of the National Association of School Psychologists at 13-14, (Apr. 13-17, 1993) (on file with the Duke Journal of Gender Law \& Policy) (studying a girls' Catholic high school's transition from singlesex to coeducational and finding that there was no significant change in total self-confidence among males or females as the students moved from a single-sex to a coeducational school). During the Faulkner trial:
[^3]:    46. See VMI I, 766 F. Supp. at 1435 ("[A]dolescent males benefit from being able to focus exclusively on the task at hand, without the intrusion of any sexual tension.") (citation omitted).
    47. See id. at 1411-12.
    48. See AAUP Brief, supra note 39, at 4 (citation omitted).
    49. See id. (citation omitted).
    50. See id.
    51. See id. (citation omitted).
    52. See id. (citation omitted).
    53. See id. (citation omitted).
    54. See id. at 5 (citation omitted).
    55. See id. at 5-6.
    56. See id. at 6 .
    57. See Carol Nagy Jacklin, Female and Male: Issues of Gender, 44 AM. Psychologist 127, 127-28 (1989) (finding that differences in test results for males and females have declined over time, and that differences in earlier testing may have been the result of gender bias in the tests themselves); see also Janet Shibley Hyde, Meta-Analysis and the Psychology of Gender Differences, 16 SIGNS 55, 72 (1990). Shibley Hyde's article provides a comprehensive overview and critical assessment of the scholarship on sex differences in the abilities of males and females. In dissecting research that had shown some differences in verbal ability (in which females scored higher than males), mathematical ability (in which males scored higher than females), and spatial ability (in which males scored higher than females), she noted problems in the initial research, as well as a decline in difference over time. See id. Shibley Hyde concluded that differences in verbal ability no longer exist, differences in mathematical ability are moderate, and that only one type of spatial relation (mental rotation) shows significant difference, and that the variance may be attributable to differences in training. See id. These differences in each category do not predict the competence of individuals. See id.; see also Janet Shibley Hyde \& Marcia C. Linn, Gender Differences in Verbal Ability: A Meta-Analysis, 104 Psychol. Bull. 53, 64 (1988) (assessing 165 studies on gender difference in verbal ability and concluding that the differ-
[^4]:    64. See Carol Tavris, The Mismeasure of Woman 42 (1992) ("[T]he overlap between men and women is always far greater than the difference, if any."); see also AAUP Brief, supra note 39, at 13 (noting that "in most cases, the area of overlap [in psychological, behavioral, and cognitive traits] is larger than the area of difference.").
    65. See Jeanne Marecek, Gender, Politics, and Psychology's Ways of Knowing, 50 Am. PsyCHOLOGIST 162, 163 (1995) ("[O]ther aspects of social location, such as race, ethnicity, and social class, mediate the significance and import of gender.") (citation omitted); see also TAVRIS, supra note 64, at 39-43; Carol Tavris \& Carole Offir, The Longest War: Sex Differences in Perspective 56 (1977).
    66. See Eagly, supra note 58, at 155 ("[T]o the extent that sex differences in spatial ability arise from experience, psychologists might help devise ways to give girls and women more equal access to experiences that train high spatial ability.") (citation omitted).
    67. See Maresi Nerad, Gender Stratification in Higher Education: The Department of Home Economics at the University of California, Berkeley 1916-1962, 10 WOMEN's Stud. Int'L F. 157, 157 (1987) (arguing that universities structurally exclude women from the ranks of power, prestige, and privilege).
    68. See Tidball, Perspective, supra note 5, at 132; see also Mikyong Kim \& Rodolfo Alvarez, Women-Only Colleges: Some Unanticipated Consequences, 66 J. Higher Educ. 641, 661-62 (1995) (finding encouragement from teachers is important to student development in college); Angela McRobbie, Keep the Girls from the Boys, New Statesman \& Soc'Y, Aug. 12, 1988, at 13-14 (arguing that girls benefit socially and academically from single-sex schooling).
    69. See sources cited supra note 68.
    70. See Susan Faludi, The Naked Citadel, New Yorker, Sept. 5, 1994, at 62, 64.
    71. See VMI I, 766 F. Supp. at 1435.
    72. See Bernice Resnick Sandler et al., The Chilly Classroom Climate: A Guide to Improve the Education of Women 7 (1996); Lee et al., supra note 32, at 97.
    73. See Vojdik, supra note 16, at 6-7; Vojdik, supra note 21, at 74-76.
[^5]:    74. Cf. Lee et al., supra note 32, at 115-16; Tidball, Baccalaureate Origins, supra note 5, at 397; Tidball, Perspective, supra note 5, at 135.
    75. See SANDLER ET AL., supra note 72, at 7; Vojdik, supra note 21, at 69, 74-76 (discussing the chilly classroom climate); see also Lee et al., supra note 32, at 93-95.
    76. See Faludi, supra note 70, at 64-65. Faludi provided a graphic depiction of abusive behavior at The Citadel, close to what might be considered human rights violations or, at the very least, violations of The Citadel's rules prohibiting hazing. For example, she related the story of a freshman cadet who was "knocked down with a rifle butt and beaten in the dark by a pack of cadets." Id. at 67. Another incident of hazing involved forcing a member of the cycling team "to hang by his fingers over a sword poised two inches below his testicles." Id.
    77. See Valerie E. Lee \& Marlaine E. Lockheed, The Effects of Single-Sex Schooling on Achievement and Attitudes in Nigeria, 34 Comp. EdUC. Rev. 209, 227 (1990).
    78. See VMI I, 766 F. Supp. at 1441 (finding that experts generally agree that coeducation would make the VMI ROTC program a "better training program from the perspective of the armed forces, because it would provide training in dealing with a mixed-gender army.").
    79. See id. at 1422-23 (describing the "rat line" process at VMI).
    80. See Brief of Mary Baldwin College as Amicus Curiae in Support of Respondents at 9, VMI $V, 116$ S. Ct. 2264 (1996) (Nos. 94-1941, 94-2107) [hereinafter Mary Baldwin Brief].
    81. See, e.g., sources cited infra notes 82-83.
    82. A comparative study of methods used to measure self-esteem, using the fact that women are less likely than men to report that they can do things as well as most other people, found that eliminating one of the items in a widely used measure of self-esteem produced a latent variable that showed no difference in self-esteem between women and men. See James A. McRae, Jr., Rasch Measurement and Differences Between Women and Men in Self-Esteem, 20 SOC. SCI. RES. 421, 433-35 (1991). A study of 24 males and 24 females ages 17-26 found that performance expectancies, as measured through competitive video games, were more related to skill than to gender. See Evelyn G. Hall, The Effect of Performer Gender, Performer Skill Level, and Opponent Gender on Self-Confidence in a Competitive Situation, 23 SEX ROLES 33, 38-40 (1990). No significant gender differences were found in expectancies for future performance after losing to a more skilled opponent. See id. A study of 648 high school and college students tested the relationship of selected variables to self-esteem and found self-esteem to be a function of school size. See Alyce Holland \& Thomas Andre, The Relationship of Self-Esteem to Selected Personal and Environmental Resources of Adolescents, 29 ADOLESCENCE 345, 35859 (1994).
[^6]:    89. For a discussion of these studies, see AAUP Brief, supra note 39, at 20-28.
    90. See Vojdik, supra note 16, at 5 n .34 ("Most of these studies examined all-female elementary and secondary schools or elite women's colleges during the 1970's.").
    91. See Kim \& Alvarez, supra note 68, at 642 ("In 1967, 9.5 percent (absolute number: 147,400 ) of all full-time women students were enrolled in women-only colleges, but by 1987 enrollment had dropped to only 2 percent (absolute number: 52,000).").
    92. See id. at 641.
    93. See Tidball, Perspective, supra note 5 , at 132.
    94. See id. (examining the undergraduate backgrounds of 1500 women).
    95. The undergraduate schools at Yale and Princeton became coeducational in 1969, followed by Brown and Dartmouth in 1972, Harvard in 1976, and finally Columbia College in 1983. See B-C WOMEN's HANDBOOK, supra note 11, at iv.
    96. See Cynthia Fuchs Epstein, The Roles of Women in Politics in the United States, in AcCESS TO Power: Cross-National Studies of Women and Elites 132 (Cynthia Fuchs Epstein \& Rose Laub Coser eds., 1981).
    97. See Kim \& Alvarez, supra note 68, at 653 ("Students who enroll in women-only colleges appear to start with slightly higher levels of social self-confidence.")
    98. For example, Antioch College, a small, coeducational undergraduate school, has produced seven MacArthur Fellows, five of whom were women. See Maureen Conlan \& Camilla Warrick, 'Genius Grant' Enriches Author: Ohioan Honored for Children's Works, CIN. Post, June 14, 1995, at 1A. These Fellowships, known as "genius" awards, recognize leadership, creativity, innovation, and ability to create social change. See id. Only five schools in the nation have produced more MacArthur Fellows. See id.
[^7]:    99. See Crosby et al., supra note 5 , at 115 . For example, Crosby notes that five percent of the graduating class at Smith College (all-female) were biology majors, while six percent of the graduating women at Williams College (coeducational) were biology majors (as were six percent of the men).
    100. See id. at 116.
    101. Id.
    102. See Gwen Moore \& Deborah White, Pathways to the Top For Women and Men Business Leaders, Paper Presented at the Eastern Sociological Society at 7 (Apr. 1, 1995) (on file with the Duke Journal of Gender Law E Policy). Moore and White's study of men and women business leaders (vice presidential level or above) found that $16.7 \%$ of women leaders went to "Seven Sisters" colleges (Barnard, Bryn Mawr, Mount Holyoke, Radcliffe, Smith, Vassar, Wellesley) and another $6.7 \%$ went to other women's colleges. See id. at 7 \& tbl.2.
    103. See id. (about 77\% graduated from coeducational schools).
    104. See Gwen Moore, Gender and Informal Networks in State Government, 73 SOC. SCI. Q. 46, 59 (1992).
    105. Moore \& White, supra note 102, at $6,10,11$.
    106. Cf. Marecek, supra note 65 at 162-74 and accompanying text (discussing a parent's impact on a child's self-perception).
    107. See DAVID Freedman et al., Statistics 4 (2d ed. 1991) ("Confounding is a major source of bias.").
    108. Cf. sources cited supra note 13 and accompanying text.
    109. Cf. EPSTEIN, supra note 13, at 55 (stating that from 1970-71 to 1974-75, the proportion of women enrolled in law schools rose from $8.5 \%$ to $19 \%$ ).
[^8]:    118. See VMI V, 116 S . Ct. at 2268 ; see also Fox-Genovese, supra note 112 , at 51 ("[W]ere The Citadel to admit women, it would expand its sexual diversity while reducing its diversity by class and perhaps race.").
    119. See id. at 2276 (discussing VMI's claim that "the option of single-sex education contributes to 'diversity in educational approaches . . . '"').
    120. See id. at 2279; see also Vojdik, supra note 16, at 6-7 ("As a Citadel witness explained, 'The program is not designed for females.'").
    121. See AAUP Brief, supra note 39, at 23-24 (explaining how Carol Gilligan's research was used to support the view that introducing women into all-male settings would be "counterproductive for women and would deprive men of a unique and valuable opportunity."). See generally CAROL GILLIGAN, In A Different Voice: Psychological Theory and Women's Development 9-23 (1982) (finding that women and men thrive under very distinct social activities and ways of communicating, particularly during childhood and adolescence).
    122. See Fox-Genovese, supra note 112, at 51.
    123. See VMI V, 116 S . Ct. at 2269 ; see also supra note 70 and accompanying text.
    124. AAUP Brief, supra note 39 , at 8 .
    125. See VMI I, 766 F. Supp. at 1438-41 (describing how life at VMI would change if women were admitted).
    126. See Faludi, supra note 70, at 70-72.
    127. See id. at 64, 70-72.
    128. Id. at 65 .
[^9]:    129. See Fox-Genovese, supra note 112, at 51-52.
    130. See id.
    131. Id. at 52 .
    132. Id. at 51.
    133. Vojdik, supra note 16, at 8 (citations omitted).
    134. See id. at 5-8 (describing the use of narrative and rhetoric in the arguments offered by VMI and The Citadel).
    135. See EPSTEIN, supra note 3, at 215-31 (stating that symbolic segregation "is necessary to maintain gender distinctions because physical separation can do only part of the job of differentiation.") (citations omitted).
[^10]:    136. See id.
    137. See id. at 118-31 (discussing the use of laws, force, and the threat of force to restrict or encourage women's equality).
    138. For example, fledgling female litigators found that the fear they experienced going into the courtroom for the first time, which they attributed to their being women, was common to men as well. See EpSTEIN, supra note 13, at 308.
    139. Cf. Robert K. Merton, Social Theory and Social Structure 421 (1968) (discussing the dangers inherent in selecting sample groups and reference groups for social structure studies).
