

WHAT IS KNOWN ABOUT THE IMPACT OF SINGLE-SEX AND COEDUCATIONAL SCHOOL STRUCTURES ON STUDENT LEARNING

A RESEARCH LITERATURE REVIEW

A SUMMARY OF FINDINGS, WITH QUOTATIONS

(copyright: Geoffrey Shaw)

GEOFFREY SHAW (EdD)

KLINGENSTEIN VISITING FELLOW,

TEACHERS COLLEGE, COLUMBIA UNIVERSITY, NY. 2009

AUTHOR(S)	PUBLICATION	STUDY DETAILS	QUOTATIONS FROM ARTICLE (or explanation of findings)
Campbell and Storo (1996)	Washington DC: <i>Women's Educational Equity Act Program (ED)</i> , (pamphlet) 9 pp.	Addresses the research related to under-achievement of women in mathematics and science.	Argues that the best solution is not single-sex classes but equitable co-ed. "Not all girls are passive and not all boys are aggressive. Some girls and boys learn better in cooperative, low-key environments; others do better in more competitive, quickly-paced environments. Neither girls nor boys learn well in disruptive environments in which their efforts are ridiculed. We need to look at the individual student's needs, and not act on gender stereotyped assumptions."
Lee and Bryk (1986)	<i>Journal of Educational Psychology</i> . 78(5), 381-95	1,807 students in 75 U.S. Catholic high schools, 45 of them single-sex institutions, using material from the 1980 national <i>High School and Beyond</i> survey	Whether concerning academic achievement, achievement gains, educational aspirations, locus of control, sex role stereotyping, or attitudes and behaviors related to academics, results indicate that single-sex schools deliver specific advantages to their students, especially female students.
Marsh (1989)	<i>Journal of Educational Psychology</i> , 81(1), p70-85.	Same data as used by Lee & Brych. Also, 2,332 students representing 21 single-sex boys' schools, 26 single-sex girls' schools, and 33 coeducational schools	Criticises Lee & Brych conclusions for lack of control of pre-existing differences in school-groups of students. Also carries out independent analysis of similar data. "In summary, when appropriate controls were introduced, almost no differences in 1982 and 1984 outcomes could reasonably be attributed to the effect of school type and there was no tendency for the few differences that did exist to consistently favor students from single-sex or coed schools. These results were reasonably consistent across boys and girls, and across different strategies for correcting for preexisting differences."
Marsh et al (1988)	<i>American Educational Research Journal</i> , 25(2), 237-69.	Australia: transition between 1982 and 1985 of two single-sex schools combining to make two coeducational schools, with a population of 2250 students	"Across the five years of the study there were no significant differences in either mathematics or English achievement. Results suggest that the transition to co-ed benefited both boys and girls in multiple dimensions of self-concept and that these benefits were not gained at the expense of academic achievement."
Harker and Nash (1997)	<i>Paper presented at the Annual Meeting of the American Educational Research Association. Chicago, IL, March 24-28, 1997. 38 pp</i>	New Zealand longitudinal collection of school data, the Progress at School project, analysing data from 5000 students from 37 schools.	"The data show that when adequate control is exercised for the different ability levels and the social and ethnic mix of the two types of school, the initial significant differences in academic achievement disappear. Thus the popular belief that girls will do better academically at single-sex schools is not sustained by the data."
Lepore and Warren (1996)	<i>Paper presented at the Annual Meeting of the American Educational Research Association (New York, NY, April 8-12, 1996)</i>	US database, the National Educational Longitudinal Study of 1988 (NELS:88) with a sample population of 25,000 randomly selected students. Lepore and Warren extracted data for just under 800 Catholic school students, using Lee and Bryk's criteria for inclusion.	"In short, we cannot conclude that single-sex Catholic schools are especially advantageous academic settings, at least relative to coeducational Catholic schools. We find no evidence that singlesex Catholic school boys or girls <i>learn</i> more than their coeducational Catholic school peers during the high school years."

Lepore and Warren (1997)	<i>American Educational Research Journal</i> 34(3), 485-511	As above	"The results indicated that single- sex Catholic secondary schools were not especially favorable academic settings and that any advantages of attending these schools only benefited boys. However, any sector differences in student achievement test scores were explained by pre-enrollment differences in measured background and prior achievement."
Steinback & Gwizdala (1995)	<i>School Science and Mathematics.</i> 95 (1), 36-41.	US Catholic system merger of two single-sex schools in 1988, and looking particularly at the attitude of girls towards maths 173 girls' attitudes at the beginning of the merger and again one year on.	"...the inclusion of males in the school, and mathematics classrooms in particular, for the most part did not change female students' attitudes after only one year. Their attitudes toward both mathematics and their own performance in mathematics remained generally positive....Their perceptions of what the mixed-sex classroom would be like, as reflected in their responses from Year 1 of this study were fairly accurate. In Year 2 they report that 'boys are considered smarter by the teachers', 'boys are a distraction' (so are girls for the boys), 'want to impress the boys', 'feel intimidated', and 'feel embarrassed if do poorly'. These were similar responses to those they gave in Year 1."
Chouinard, Vezeau & Bouffard (2008)	<i>Educational Studies</i> 34(2), 129-144.	Canada: two cohorts of girls, a total of 340 girls moving between 7th and 9th grade; and 9th and 11th grade, from eight coeducational and two single-sex schools during a period of three academic years in a longitudinal research scheme.	"In general, mixed-design repeated measures analyses of variance indicated no effect of the environment or of the interaction between environment and time of measurement."
Gilson (1999)	<i>Paper presented at the annual meeting of the American Educational Research Association. Montreal, April 19-23, 1999.</i>	US: attitudinal questionnaire and independently-administered standardised test results on a sample of 467 girls from 10 independent single-sex schools and 208 girls from 10 independent coeducational schools	It is a mistake to view gender as the 'key variable' that determines a school's effectiveness. What is most apparent from the results of this study is the importance of good mathematics teaching regardless of school sector.
Robinson and Smithers (1999)	<i>Research Papers in Education: Policy and Practice</i> , 14(1), 23-49.	1997 UK GCSE and A-Level results	When, as far as possible, like is compared with like, the apparent academic differences between single-sex and co-educational schools largely disappear.

Carpenter & Hayden (1987)	<i>Sociology of Education</i> , 60(3), 156-67.	girls in single-sex and coeducational schools in both Victoria (n = 632) in 1979/80 and Queensland (n = 503) in 1978, the specific sample members being drawn from the population according to a controlled formula designed to ensure representative validity.	“In one state, attendance at a girls' school was a significant predictor of a girl's exposure to key social influences, her enrollment in a science course in year 12, and her academic achievement. In the other state, however, the sex composition of the school did not affect academic achievement or selected antecedents.” “Our findings support attempts in Australia to provide single-sex classrooms for subjects such as mathematics, computer science, physics, and chemistry.”
Gibb, Fergusson & Horwood (2008)	<i>Australian Journal of Education</i> , 52(3), 301-317.	940 New Zealand students, gathered as part of the Christchurch Health and Development Study (CHDS), a longitudinal study of a birth cohort of 1265 individuals born in Christchurch, New Zealand in 1977.	“At coeducational schools, there was a statistically significant gap favouring females, while at single-sex schools there was a non-significant gap favouring males. This pattern was apparent for educational achievement both at high school and in tertiary education. These results indicate that single-sex schooling may mitigate male disadvantages in educational achievement.”
Jackson & Smith (2000)	<i>Educational Studies</i> , 26(4), 409-422.	(a) two Sydney secondary single-sex schools joined together in a two-year transformation into a co-educational school. A ten-year study. (b) two-year investigation in an English co-ed secondary school where single-sex maths classes were introduced for one cohort of pupils for five school terms, after which mixed-sex classes were reintroduced.	“In both studies, subject-specific self-concept was higher in the co-educational settings than in the single-sex settings.” “Data yielded by the interviews and the questionnaires, however, do not lend weight to the theory that the transfer from a single-sex into a mixed-sex environment would lead to an increase in domain-specific self-concept for the girls. Indeed, on the basis of the more qualitative data collected in the two studies, one might predict exactly the opposite effect for girls. In general, perceptions of female pupils in England and of teachers in Australia were that girls seemed to be disadvantaged in certain ways by co-educational settings as compared with single-sex ones.”
Harker (2000)	<i>British Journal of Sociology of Education</i> , 21(2), 203-18.	The ‘Progress at School’ project was a longitudinal study of 5300 students in 37 schools. Data from that project are used in this paper, as well as national-level data from the Ministry of Education and the National Qualifications Authority (NQUA).	“Eileen Byrne, in her incisive review of the operations of educational establishments as they impinge on the lives of women, invokes what she calls the ‘Snark syndrome’—i.e. if something is repeated often enough, it becomes true! Much of the conventional wisdom surrounding the education of girls and women is, she argues, of this type. Where evidence is used, much of it ‘is unscholarly, or anecdotal, or based on small samples, or inconclusive’ (Byrne, 1993, p. 182). It is a commonly held belief in New Zealand (as elsewhere) that girls will do better in academic subjects (particularly mathematics and science) at a single-sex school, than they would if they attended a coeducational school” “The popular belief that girls will do better academically at single-sex schools is not sustained by the data reported in this paper.”
Tickner (1992)	Master's thesis, Dominican College, USA. 26 p.	two sets of San Francisco private school fourth grade boys: thirty-nine from an all-boys' school and twenty-three from a coed school.	“Although the statistical difference is slight between the attitudes of the boys in each of these schools, there is a stronger positive attitude towards school from the coeducational school.”

Haag (2000)	<i>ERIC Digest.</i> Clearinghouse on Elementary and Early Childhood Education, Champaign Illinois.	literature review of eleven studies	"Although research finds that girls view the single-sex classroom as more conducive to learning, research fails to confirm significant gain in girls' math and science achievement in the single-sex classroom."
Mael (1998)	<i>Review of Educational Research, v68 n2 Sum 1998.</i> p101-29	Literature review	"Separate-sex schooling seems to provide potential academic and attitudinal benefits for at least some students." "comparisons of CE and SS schooling on any number of dimensions generally takes as a given that each school of either type embodies the qualities or deficiencies typical of that form, without considering the possibility that within-type differences due to variables such as locale, school tradition, school administration values and ideologies, and student body characteristics may be greater than between-type differences."
Mael et al (2004)	Theoretical arguments for and against single-sex schools: a critical analysis of the explanations. Washington: American Institutes for Research.	Literature review of 150 studies	"The question of whether single-sex (SS) schooling is preferable to coeducation (CE) for some or all students continues to be hotly debated. Much of the debate is philosophical and would be waged even if single-sex schooling were shown to be highly advantageous for one or more subpopulations. However, the actual research evidence, although suggestive that SS schools can benefit some students in some realms of academic and socio-emotional accomplishment, is equivocal." "A number of theories, rationales, or explanations have been advanced to account for why SS schools may be more effective. Conversely, a number of rationales have been advanced for why SS schools may be harmful or less effective than CE schools. On closer inspection, most of these explanations are problematic for one or more of the following reasons: 1. The explanations do not specify what outcome(s) SS schools purport to affect and by what mechanism. 2. The explanations do not clarify whether these effects <i>require</i> SS schools or whether they are just more typically found at SS schools. 3. The explanations do not specify whether SS schools would be expected to affect all students. For instance, it is possible that the claimed benefits would help males but not females, high school but not elementary school students, or subsets of each. 4. The explanations reflect processes leading to outcomes that may be desirable to an external interest group but do not necessarily benefit the students or support the wishes of their parents. Conversely, SS schools may lead to desired outcomes for the students or their parents but may contravene the societal goals of external interest groups."

Mael et al (2005).	<i>Single-sex versus coeducational schooling: a systematic review.</i> Doc # 2005-01 US Department of Education. 148 pp	Literature review of 150 studies	<p>“As in previous reviews, the results are equivocal. There is some support for the premise that single-sex schooling can be helpful, especially for certain outcomes related to academic achievement and more positive academic aspirations. For many outcomes, there is no evidence of either benefit or harm. There is limited support for the view that single-sex schooling may be harmful or that coeducational schooling is more beneficial for students.”</p> <p>Of the forty-three studies relating to concurrent academic accomplishment, 35% find for single-sex schools whereas the remaining 65% find no difference or a mixture of differences.</p>
Jacobson <i>et al</i> (1995)	Single-sex education. A public Policy issue. Project Report. Columbia U, New York. School of International and Public Affairs.	USA. interviews with twenty-two public intellectuals, academics/researchers; government officials/legislators; public interest groups/educational associations, and practising lawyers/legal scholars.	potential pedagogical benefits of single-sex K-12 public education <u>might</u> (original emphasis) be meritorious of further study
Datnow, Hubbard and Woodey (2001)	Lessons from California's pilot program. Final report. Ford Foundation, NY; Spencer Foundation, Chicago.	studied a late 1990s Californian project in which six pairs of single-sex schools were established, sometimes within coeducational school campuses, sometimes not	<p>“Implementation of single gender academies had positive and negative consequences for students and teachers remaining in counterpart coeducational settings.”</p> <p>“Traditional gender stereotypes were often reinforced in single gender academies.”</p>
Bauch (1989)	Paper presented at the annual meeting of the Catholic Educational Association, Chicago, Illinois, March 1989. 26p	Some review of literature; some philosophical or historical.	<p>“Catholic education has distinct approaches toward the education of girls and boys; when these approaches are “blended” in a coed school, the distinctiveness is lost. Moreover, the achievement advantages found in Catholic schools can be attributed to single-sex Catholic schools, not to Catholic schools in general.”</p> <p>“It is evident that girls' schools, more than any other type of Catholic education, come closest in their traditions and mission in pointing the way for a preferred future in Catholic education.”</p>
Dorman (1997)	<i>Paper presented at the Annual Meeting of the American Educational Research Association (Chicago, Illinois, March 24-28, 1997).</i> 26 pp.	Aust: 80 Grade 9 and Grade 12 Science and Religion classes in metropolitan and provincial Queensland Catholic schools.	“Results indicated that Catholic girls' schools had more positive classroom environments than Catholic coeducational and boys' schools.”

Laster 2004	<i>Education Digest: Essential Readings Condensed for Quick Review</i> , 70(1), 59-62.	As assistant principal of a Mississippi elementary school, she instituted a structure with each of a girls', a boys' and a coed class.	"while many people will disagree with single-sex education, this researcher feels it must be considered because it can be a viable option to meet students' learning needs."
Hughes (2006)	<i>National Forum of Educational Administration and Supervision Journal</i> 23(2), 5-14.	US. Philosophical and some literature review. Especially related to Title IX and the US public school sector.	"The author of this article concludes that school districts should give parents the choice of single-sex education or coeducation by offering single- sex classes or single-sex schools along with coeducation."
Smith (2007)	<i>Gender and Education</i> 19(2), 179-198.	ethnographic study of a socially deprived housing estate school in a north-eastern coastal city in the UK	"The paper argues that, in a school culture of pervasive homophobia, some teachers paradoxically acted as 'cultural accomplices', naturalizing compulsory heterosexuality in engaging alienated and disruptive young men. Moreover, evidence suggests that this is an emerging response to managerialist pressures to 'continuously improve' grades by adopting 'boy friendly' approaches. This renders questionable strategies predicated on naturalizing assumptions about boys and makes problematic calls for more 'role models' without investigating how gendered pedagogies affect schooling for girls and boys."
Malacova (2007)	<i>Oxford Review of Education</i> , 33(2), 233-259.	paired data from the UK, looking at 2002 Key Stage 3 data and 2004 GCSE data	"The analysis suggests that pupils in a selective environment achieve higher progress in single-sex schools; however, the advantage of single-sex schooling seems to decrease with increasing pupils' prior attainment (for girls) or with increasing school 'selectiveness' (for boys)."
Daly & Defty (2004)	<i>Evaluation and Research in Education</i> , 18(1&2). 129-136.	UK GCSE data	"Girls' achievement within girls' schools was slightly higher than for girls in mixed schools, after adjustment for a range of factors. On average, the difference was about one tenth of a standard deviation. Boys, on average, performed less well in boys' schools than in mixed schools by about the same amount. In terms of girls' attitudes to mathematics, attendance at a girls' school was associated with more positive attitudes, again by about a tenth of a standard deviation. Boys' attitudes to mathematics were not significantly different between those attending boys' schools and those in mixed schools, however."
Campbell & Evans (1993)	Paper presented at the annual meeting of the Mid-south Educational Research Association, New Orleans, 12 November, 1993. 18p	790 sample students were from parochial single-sex schools and public coeducation schools in Louisiana	"...a much larger percentage of girls at the all-girls schools were enrolled in chemistry, advanced biology and advanced math classes, and a wider variety of advanced math and science courses was offered at the all-girls schools."

Wills, Kilpatrick & Hutton (2006)	<i>British Journal of Sociology of Education</i> , 27(3), 277-291	program in a Tasmanian coeducational government primary school where single-sex classes had been conducted for some time. Unusually for such experiments, the segregated classes operated across the curriculum although they would be "brought together as a coeducational class for specific pedagogical purposes."	"The whole school community, including parents, indicated there had been real improvement in the general school climate as a result of the innovation. However, the paradox revealed by this study is that formalised indicators of academic achievement do not seem to show an equal level of improvement."
Leder and Forgasz (1994)	Paper presented at the annual meeting of the American Educational Research Association, New Orleans. April 4-8, 1994.	program introduced at a Melbourne state school to make all Year 10 Maths classes single-sex	"This study has not provided unequivocal evidence that single- sex mathematics classes per se address well-documented gender differences in mathematics learning outcomes. However, the program evaluated did not appear to have been detrimental to the majority of grade 10 students in the school investigated and may well have benefited many." "Performance levels were not significantly different for males and females throughout the project year.
Dunlap (2002)	<i>Unpublished Master of Education thesis, Cedarville University</i> 105 pp.	seven-week project split a pair of mixed Year 5 maths classes in a Kentucky K-12 private Baptist school into a boys' and girls' class	"No statistical significance was noted in girls' achievement between a single-gender classroom and a coeducational classroom."
Friend (2006)	<i>RMLE Online: Research in Middle Level Education</i> , 30(4), 1-15. http://eduproxy.tc-library.org/?url=http://search.ebscohost.com.eduproxy.tc-library.org:8080/login.aspx?direct=true&db=eric&AN=EJ804115&loginpage=Login.asp&site=ehost-live	US midwest middle school, following concern that girls saw Science as a male activity. Students were randomly allocated to an all boys or a coeducational class, both taught by a male teacher, or an all-girls or coeducation class, both taught by a female teacher.	"same-gender grouping did not produce significant differences in student science academic achievement and same-gender classes did not create a more positive classroom climate."
Gray & Wilson (2006)	<i>Educational Studies</i> , 32(3), 285-298	a school in Northern Ireland, medium sized with a working-class catchment area. All curriculum areas were segregated.	"Contrary to its stated aims, the majority of teachers believe that, since the introduction of single-sex classes, academic performance and classroom behaviour have deteriorated."

<p>Younger & Warrington (2006)</p>	<p><i>American Educational Research Journal</i>, 43(4), 579-620.</p>	<p>national UK Raising Boys' Achievement project. They carried out three case studies, involving six schools spread around the country. The schools generally felt that there were achievement improvements, although the provision of single-sex classes was only one amongst several strategies employed specifically to raise boys' achievement</p>	<p>"The article suggests that, while single-sex classes have the potential to raise the achievement levels of both boys and girls and to have a positive impact on the atmosphere and ethos for learning, these gains will be achieved only if the initiative is developed within gender-relational contexts rather than situated within recuperative masculinity policies." "The resurrection of interest in single-sex classes in coeducational schools in many parts of the "developed" world has been generated almost entirely, as we have seen, by a concern for boys, amid the general moral panic about their achievement levels, their apparent disaffection and disengagement from schooling, and their seeming dislocation from aspects of society. Such concerns have been contextualized in recuperative masculinity agendas that, within school contexts, have prioritized issues of curriculum, pedagogy, and organization from boys' perspectives and have been based around essentialist arguments that have generalized about the fundamental nature of boys and girls without regard to sexuality, ethnicity, or class. As we made clear earlier, we find such a view difficult to accept because of the diversity and fluidity within gender constructions and because stereotypical perspectives of "failing" boys do not reflect the reality for many boys".</p>
<p>Lee and Marks (1992)</p>	<p><i>Sociology of Education</i>, 65(July), 226-253.</p>	<p>USA. 3000 1989 senior class students from sixty private schools, as a stratified random sample from girls', boys', and coeducational schools. For the study, they employed the database of the US National Study of Gender Grouping in Independent Secondary Schools.</p>	<p>"Single-sex schools, especially those for girls, seem to face a particularly difficult situation. It is traditional families who are, by and large, supporting this type of education. Such young women and their families are more likely to be seeking a protective environment in the single-sex world than the opportunity structures these schools may be providing for female adolescents' development. Given that the schools operate in a difficult market environment, they must simultaneously respond to those who seek them out (traditional families) and develop new markets for those who might respond to the different appeal on the basis of sex equity"</p>
<p>Robinson & Smithers (1999)</p>	<p><i>Research Papers in Education: Policy and Practice</i>, 14(1), 23-49.</p>	<p>1997 UK GCSE and A-Level results</p>	<p>"...nearly all of those (approx 90%) who had been to co-educational schools, said they would also send their children to co-educational schools, but only 38 percent of the female students and 30 percent of the male students who had been to single-sex schools wanted their children to go to single-sex schools." Of those students who had experienced both single-sex and coeducation, 23.1% of girls and 18.2% of boys preferred their single-sex experience while 38.5% of girls and 48.5% of boys preferred the coeducation.</p>

Lee, Marks & Byrd (1994)	<i>Sociology of Education</i> 67(April) 92-120.	USA: Observational data were collected in 86 classrooms in 21 schools in specific curricular areas.	<p>“Since the frequency of sexism was roughly equivalent across the three types of schools, neither coeducation nor single-sex schooling may be exonerated.”</p> <p>“We sensed a clear tension in even the most academically demanding girls' schools (often voiced by the schools' heads) between trying to provide educational environments that are relational and, at the same time, to hold to demanding intellectual standards that develop independence.”</p> <p>“Although the presence of two sexes does not eliminate sexism, and mixed-gender relations in schools may replicate entrenched societal patterns, the presence of both boys and girls seems to moderate the most flagrant forms of sexism.”</p> <p>“families and students who choose all-girls' schools are likely to be seeking <i>either</i> safe and traditional environments for "young ladies" or academically demanding educational environments in which girls are free to flourish—not both.”</p>
Signorella, Frieze & Hershey (1996)	<i>Psychology of Women Quarterly</i> 20. 599-607	range of mixed and segregated class types in continuing coed, newly coed and continuing single-sex classes on two campuses of a US K-12 private girls' school.	<p>“Our comparison of students in different classroom settings showed no consistent tendency for students in single-sex classrooms to display less gender stereotyping.”</p> <p>“Therefore, this study corroborates the results of other research showing no consistent advantage to girls in single-sex as compared to mixed-sex schools. These data challenge the widespread belief that mixed-sex schools are always detrimental for girls.”</p>
Sukhnandan (2000)	<i>An investigation into gender differences in achievement:—a review of recent research and LEA information on provision.</i> London: National Foundation for Educational Research.		<p>“there has been little research, as yet, into the level of take-up of different strategies, the rationale behind the adoption of specific strategies, how various strategies have been implemented, and the extent to which the strategies have addressed gender differences in achievement “</p> <p>”The modification of teaching approaches, in terms of lesson structure, teaching methods and curriculum materials, to match the learning styles of boys and girls can be perceived as an approach that simply reinforces the different learning styles of boys and girls by exploring the areas where they are strong and by ignoring their areas of weakness. Although this may lead to increased pupil achievement in terms of examination performance, it may work to reinforce gender stereotypes regarding appropriate teaching and learning methods for boys and girls.</p>
Martino and Meyenn (2002)	<i>Cambridge Journal of Education</i> , 32(3), 303-24.	Western Australian Catholic coeducational school which had begun single-sex English classes at Year 8 as a response to what they saw as literacy problems for boys.	<p>“It is concluded that single-sex classes as a strategy per se do not necessarily produce enhanced social and educational outcomes for students. Rather, as indicated in the research, there needs to be more attention directed to the particular effects of pedagogy and the normalising assumptions about gender that inform the implementation of curriculum in both single-sex and coeducational classes.”</p> <p>“we have drawn attention to some important issues relating to the effects of particular pedagogical practices which are attributable more to specific teacher knowledges and assumptions about gender than to the single-sex strategy <i>per se</i>. This raises critical questions about the relative absence of qualitative research into an examination of the specificities of teachers' pedagogical practices within the context of the implementation of single-sex classes and single-sex schooling.”</p>

<p>Heywood (1995)</p>	<p><i>Gender and Education</i> 7(2)</p>	<p>teacher of fifteen years' experience in a Canadian private all girls' school, sought to analyse the "gender regime".</p>	<p>"Single-sex schooling will not be the panacea for girls' difficulties with gender stereotyping. A school filled with women does not guarantee freedom from a sexist education. The very existence of single-sex schools will teach girls the principles of gender classification and when they leave these schools (even ones as 'girl friendly' as this one) they will still face the gender-stereotyped realities of the outside world." "This article begins by identifying the negative effects that traditional gender norms still have on even privileged young women who study in single-sex environments designed to foster their education and personal development. The article concludes that despite the progress in breaking down destructive gender divisions made by individual girls' schools, the gender-stereotyped realities of the outside world continue to influence the school environment and the students' thinking. Single-sex schooling for girls, therefore, becomes an even more important antidote to our society's tradition of gender bias. "</p>
<p>Mensingher (2001a)</p>	<p><i>Gender and Education</i>, 13(4), 417-429.</p>	<p>re-examines a previous inconclusive study by Dyer and Tiggemann (1996), employing elements of Eating Disorder Index (EDI) data obtained from 146 South Australian adolescent females from two demographically comparable private schools, one all girls and the other coeducational.</p>	<p>"it is predicted that girls attending single-sex schools will exhibit greater body dissatisfaction and eating disorder symptomatology than their coeducational counterparts. This hypothesis is tested and supported in a reanalysis of the data" "parents would be wise to thoroughly investigate the climate of a particular single-sex school before sending a child there on the basis of wanting an egalitarian environment for their daughter. The AAUW's 1998 publication on the coeducational/single-sex debate reports the problem with 'recent popular commentary on single-sex education sometimes informally assum[ing] that single-sex environments by their nature diminish sex stereotyping" "Other studies have alluded to the presence of subtle conflicting expectations placed on young women attending single-sex institutions."</p>
<p>Barton & Cohen (2004)</p>	<p><i>Child Study Journal</i> 34(1), 29-45.</p>	<p>Memphis public elementary school where students from a mixed Grade 4 were offered the opportunity to learn in a single-sex or mixed Grade 5 and Grade 6. The study focused on the nineteen boys and twenty girls who chose the single-sex classes for both grades. Comparisons were with the Grade 4 classes from which they came; the new coeducational class was not included in the analysis because it contained over twice as many girls as boys and was also mixed-grade.</p>	<p>"The change to same-sex classrooms was associated with more mutual friendship nominations among boys in both fifth and sixth-grades. Peer nominated overt and relational aggression, victimization, rejection, and passive/withdrawn behaviors increased for girls in fifth-grade, but decreased in sixth-grade."</p>