

eBrief Research summary for principals

The facts about girls' schools — what the research says

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Internationally, as well as in Australia and New Zealand, the evidence is clear that girls in single-sex schools benefit and they benefit significantly from a learning environment dedicated to girls. And it's not just in terms of their academic achievement but also in their self-confidence and approach to challenges and leadership. Study after study has shown that girls from single-sex schools are more willing to take risks, ask questions, make mistakes and be involved — skills that are advantageous for life success.

This is no coincidence; girls' schools specialise in girls — tailoring every aspect of teaching and learning to girls, purposely developing their confidence and potential, and empowering them to pursue whichever direction their talents lead them.

It is a myth that single-sex schools do not prepare students for a co-ed life. Students from single-sex schools are encouraged to participate in co-ed activities such as debating, music, drama, sport and academic programs that are facilitated and promoted by their schools. Girls also socialise with boys at various school events and outside of school, at home, on weekends and holidays. The factor that distinguishes girls' schools, however, is that there are no boys in the classroom to distract, discourage or intimidate girls from their learning.

The research cited below confirms the benefits that students and their teachers in girls' schools experience every day.

An Australian study found that the confidence of girls and boys attending single-sex schools is equal, despite established research findings that girls and women are generally less confident than boys and men. The researchers concluded that the emphasis on team sport and greater opportunities for leadership in girls' schools are major contributing factors to the confidence levels of girls attending single-sex schools (Fitzsimmons, Yates & Callan, 2021).

When comparing girls from a single-sex school with their peers in a closely matched co-ed school American researchers found that girls from the single-sex school were more competitive than the co-ed girls and equally as competitive as the boys (Laury, Lee & Schnier, 2019).

Another study comparing single-sex and co-ed students looked at their attitudes and confidence in STEM and found that girls in single-sex schools have the most positive attitudes to maths, followed by boys in single-sex schools, boys in co-ed schools and, lastly, girls in co-ed schools (Lee & Anderson, 2015).

Raising a confident, self-assured daughter who is comfortable with her body image is not an easy task these days. Studies show that girls in co-ed schools have lower self-esteem and feel more pressure to be thin than girls in single-sex schools (Cribb & Haase, 2016). Girls in co-ed schools are more likely than girls in single-sex schools to fast, diet and go to other extremes often associated with eating disorders (Kim et al., 2018).

In contrast, single-sex schools encourage "improved self-esteem" and "psychological and social wellbeing in adolescent girls" (Cribb & Haase, 2016) and all-girl classes help girls through the critical middle school years when they are struggling with social interactions relating to adolescence (Hart, 2015; Hart, 2016).

When it comes to feeling safe and supported at school, the incidence of bullying for girls in single-sex schools is markedly lower than for girls in co-educational schools across all six of OECD's Programme for International

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Student Assessment (PISA) measures of bullying — including being made fun of, being the subject of nasty rumours, and being pushed or hit — with a difference of up to 11 percentage points (MMG & AGSA, 2020). While an American study found that less than one per cent of girls in single-sex schools experience bullying compared with 21 per cent in co-ed schools (Johnson & Gastic, 2014).

All-girls schools also offer a safe space from gender stereotyping and sexual harassment. An Australian study of five co-educational schools confirmed previous findings that sexual bullying behaviours are commonplace within mixed-sex schools (Shute, Owens & Slee, 2016). A report released by South Australia's Commissioner for Children and Young People, found sexism and stereotyping are considered a "normal part of school culture" in co-ed schools with incidents "generally not reported due to a belief that nothing can or will be done about it" (Connolly, 2022, p. 18).

It's frequently reported that girls participate in STEM subjects at much lower rates than boys. However, girls' schools are bucking this trend. A Monash University study found that girls in single-sex schools are up to 85 per cent more likely to study higher level maths and science subjects (Forgasz & Leder, 2017). Graduates of girls' schools are also more likely to show higher levels of science self-confidence, consider themselves critical thinkers, score higher on measures of academic habits of mind, and demonstrate stronger study habits (Riggers-Piehl, Lim & King, 2018).

While academic results should never be considered the sole measure of a good education, they are an important indicator of success. Numerous studies from around the world demonstrate that students in single-sex schools benefit academically from a learning environment free from gender stereotyping, unconscious bias and the social pressures of a mixed-gender campus. An analysis of the PISA results showed that girls from girls' schools in Australia and New Zealand outperformed girls from co-educational schools on all academic measures of science, mathematics and literacy (MMG & AGSA, 2020).

Students at girls' schools are more likely to participate in sport; watch sport; take part in arts, music and cultural activities; be involved in a volunteer activity; participate in student leadership activities; and take part in environmental groups or activities (Mission Australia, 2020). Graduates of all-girl schools are "more active in volunteerism", "more interested in community development", and believe it is "very important" or "essential" to become involved in environmentally minded programs. They also "feel more prepared to work and live in a diverse society" and are "more interested in political involvement" than their coeducated counterparts (Riggers-Piehl, Lim & King, 2018).

Importantly, it should be noted that within the plethora of research related to single-sex education, there is no evidence that supports the claim that girls or boys educated in single-sex schools are unable to socialise with the opposite sex.

So what's the bottom line on single-sex education?

Single-sex learning environments increase student confidence, provide a safe place for students to develop their identities. Research from around the world provides strong evidence that girls-only education leads to higher academic achievement, higher self-esteem levels, greater participation in STEM, and enhanced career aspirations. In the absence of boys, teaching is tailored to girls' learning needs and preferences, and activities and academic opportunities are free of gender-stereotyping, empowering girls to achieve their full potential.

REFERENCES:

Connolly, H. (2022). Stereotypes and sexism: The views and experiences of SA school students (Project Report No. 28). Commissioner for Young Children & Young People, South Australia. https://www.ccyp.com.au/ccyp-reports/

Cribb, V., & Haase, A. (2016). Girls feeling good at school: School gender environment, internalization and awareness of socio-cultural attitudes associations with self-esteem in adolescent girls. Journal of Adolescence, 46, 107-114 (published online 1 January 2016). DOI: http://dx.doi.org/10.1016/j.adolescence.2015.10.019

Fitzsimmons, T. W., Yates, M. S., & Callan, V. J. (2021). <u>Lean in? The role of single-sex schools in the gendering of confidence in high school adolescents.</u> Australian Journal of Career Development, 30(2), 139-149. DOI: 10.1177/10384162211012045

Forgasz, H., & Leder, G. (2017, October). <u>Single-sex versus co-educational schooling and STEM pathways: Final report.</u> Melbourne: Monash University.

Hart, L. (2015). <u>Benefits beyond achievement? A comparison of academic attitudes and school satisfaction for adolescent girls in single-gender and coeducational classrooms</u>. Middle Grades Research Journal, 10(2), 33-48.

Hart, L. (2016). When "separate" may be better: Exploring single-sex learning as a remedy for social anxieties in female middle school students. Middle School Journal, 47(2), 32-40. DOI: 10.1080/00940771.2016.1124660

Johnson, D., & Gastic, B. (2014). Patterns of bullying in single-sex schools. Sexuality Research and Social Policy, 11(2), 126-136. DOI: 10.1007/s13178-014-0146-9

Kim, S, Bryn Austin, S., Subramanian, S, Thomas, J., Eddy, K., Franko, D, Rodgers, R., & Kawachi, I. (2018). Risk factors for disordered weight control behaviors among Korean adolescents: Multilevel analysis of the Korea Youth Risk Behavior Survey. International Journal of Eating Disorders, 51, 124-138. DOI: 10.1002/eat.22820

Laury, S., Lee, D., & Schnier, K. (2019). Will girls be girls? Risk taking and competition in an all-girls school. Economic Inquiry, first published online 28 February 2019, pp. 1-13. DOI: 10.1111/ecin.12765

Lee, K., & Anderson, J. (2015). <u>Gender differences in mathematics attitudes in coeducational and single sex secondary education</u>, in M. Marshman, V. Geiger, & A. Bennison (Eds), Mathematics education in the margins, (pp. 357-364). Sunshine Coast, Queensland: MERGA. Retrieved from: https://www.merga.net.au/documents/RP2015-37.pdf

Macquarie Marketing Group (MMG) and the Alliance of Girls' Schools Australasia. (2020). The girls' school edge: A comparison of outcomes for girls from single-sex and co-educational schools using PISA data. Published by the Alliance of Girls' Schools Australasia.

Mission Australia. (2020). Youth Survey Report 2020: Data breakdown for the Alliance of Girls' Schools Australasia. Adelaide: Mission Australia.

Riggers-Piehl, T., Lim, G., & King, K. (2018, December). <u>Fostering academic and social engagement: An investigation into the effects of all-girls education in the transition to university. Executive summary.</u> Los Angeles: Higher Education Research Institute (HERI), University of California (UCLA).

Shute, R., Owens, L., & Slee, P. (2016). <u>High school girls' experience of victimization by boys: Where sexual harassment meets aggression.</u> Journal of Aggression, Maltreatment & Trauma, 25(3), 269-285. DOI: 10.1080/10926771.2015.1129656

