

Sex Differences in Intelligence

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Research which asserts that there is a difference in male and female intelligence causes as much of a stir as that which shows the differences in race IQs. However, it is the differences in intelligence of the sexes which is far more controversial among experts, with approximately half of the studies finding no difference, and half finding a small male advantage. A meta-study of 26 articles that measure male and female IQ (see table below) was performed. Only studies of adults (or late teens) are included, and where a paper distinguishes between g and IQ, it is g that is included. Using a weighted mean (weighted by recency, citations per year and journal impact factor) of the differences in g gives a male advantage of about 2 IQ points.

Article	Male advantage in IQ points
Court (1983)	0
Jensen and Reynolds (1983)	1.67
Brody (1992)	0
Lynn (1994)	4
Carretta and Ree (1997)	0
Jensen (1998)	0
Lynn (1998)	5.09
Flynn (1998)	0
Allik, Must and Lynn (1999)	9.75
Colom, <i>et al.</i> (2000)	0
Aluja-Fabregat, <i>et al.</i> (2000)	0
Halpern and LaMay (2000)	0
Rushton and Skuy (2000)	0
Colom and García-López (2002)	0
Colom, <i>et al.</i> (2002)	0
Lynn and Tse-Chan (2003)	3.65
Colom and Lynn (2004)	4.3
Lynn, <i>et al.</i> (2004)	1.6
Lynn, Allik and Irwing (2004)	2.9
Lynn and Irwing (2004)	5
Irwing and Lynn (2005)	4.6
Nyborg (2005)	8.55
Dolan, <i>et al.</i> (2006)	0
van der Sluis, <i>et al.</i> (2006)	0
Jackson and Rushton (2006)	3.63
Deary, <i>et al.</i> (2007)	1

References

- ALLIK, Juri, Olev MUST, and Richard LYNN, 1999. Sex differences in general intelligence among high school graduates: Some results from Estonia. *Personality and Individual Differences*, **26**(6), 1137–1141.
- ALUJA-FABREGAT, Anton, *et al.*, 2000. Sex differences in general intelligence defined as *g* among young adolescents. *Personality and Individual Differences*, **28**(4), 813–820.
- BRODY, Nathan, 1992. *Intelligence*. Second ed. San Diego/London: Academic Press.
- CARRETTA, Thomas R., and Malcolm James REE, 1997. Negligible sex differences in the relation of cognitive and psychomotor abilities. *Personality and Individual Differences*, **22**(2), 165–172.

- COLOM, Roberto, *et al.*, 2002. Null sex differences in general intelligence: Evidence from the WAIS-III. *The Spanish Journal of Psychology*, **5**(1), 29–35.
- COLOM, Roberto, and Oscar GARCÍA-LÓPEZ, 2002. Sex differences in fluid intelligence among high school graduates. *Personality and Individual Differences*, **32**(3), 445–451.
- COLOM, Roberto, *et al.*, 2000. Negligible sex differences in general intelligence. *Intelligence*, **28**(1), 57–68.
- COLOM, Roberto, and Richard LYNN, 2004. Testing the developmental theory of sex differences in intelligence on 12–18 year olds. *Personality and Individual Differences*, **36**(1), 75–82.
- COURT, J. H., 1983. Sex differences in performance on Raven’s Progressive Matrices: A review. *Alberta Journal of Educational Research*, **29**, 54–74.
- DEARY, Ian J., *et al.*, 2007. Brother–sister differences in the *g* factor in intelligence: Analysis of full, opposite-sex siblings from the NLSY1979. *Intelligence*, **35**(5), 451–456.
- DOLAN, Conor V., *et al.*, 2006. Multi-group covariance and mean structure modeling of the relationship between the WAIS-III common factors and sex and educational attainment in Spain. *Intelligence*, **34**(2), 193–210.
- FLYNN, James R., 1998. Israeli military IQ tests: Gender differences small; IQ gains large. *Journal of Biosocial Science*, **30**(4), 541–553.
- HALPERN, Diane F., and Mary L. LAMAY, 2000. The smarter sex: A critical review of sex differences in intelligence. *Educational Psychology Review*, **12**(2), 229.
- IRWING, Paul, and Richard LYNN, 2005. Sex differences in means and variability on the progressive matrices in university students: A meta-analysis. *British Journal of Psychology*, **96**(4), 505–524.
- JACKSON, Douglas N., and J. Philippe RUSHTON, 2006. Males have greater *g*: Sex differences in general mental ability from 100,000 17- to 18-year-olds on the Scholastic Assessment Test. *Intelligence*, **34**(5), 479–486.
- JENSEN, Arthur R., 1998. *The g Factor: The Science of Mental Ability*. Human Evolution, Behavior, and Intelligence. Westport, CT: Praeger Publishers.
- JENSEN, Arthur R., and Cecil R. REYNOLDS, 1983. Sex differences on the WISC-R. *Personality and Individual Differences*, **4**(2), 223–226.
- LYNN, Richard, 1994. Sex differences in intelligence and brain size: A paradox resolved. *Personality and Individual Differences*, **17**(2), 257–271.

- LYNN, Richard, 1998. Sex differences in intelligence: Data from a Scottish standardisation of the WAIS-R. *Personality and Individual Differences*, **24**(2), 289–290.
- LYNN, Richard, Jüri ALLIK, and Paul IRWING, 2004. Sex differences on three factors identified in Raven’s Standard Progressive Matrices. *Intelligence*, **32**(4), 411–424.
- LYNN, Richard, *et al.*, 2004. Sex differences on the progressive matrices among adolescents: Some data from Estonia. *Personality and Individual Differences*, **36**(6), 1249–1255.
- LYNN, Richard, and Paul IRWING, 2004. Sex differences on the progressive matrices: A meta-analysis. *Intelligence*, **32**(5), 481–498.
- LYNN, Richard, and Po Wah TSE-CHAN, 2003. Sex differences on the progressive matrices: Some data from Hong Kong. *Journal of Biosocial Science*, **35**(1), 145–150.
- NYBORG, Helmuth, 2005. Sex-related differences in general intelligence g , brain size, and social status. *Personality and Individual Differences*, **39**(3), 497–509.
- RUSHTON, J. Philippe, and Mervyn SKUY, 2000. Performance on Raven’s Matrices by African and white university students in South Africa. *Intelligence*, **28**(4), 251–265.
- van der SLUIS, Sophie, *et al.*, 2006. Sex differences on the Dutch WAIS-III. *Intelligence*, **34**(3), 273–289.