

1. Recent Reviews on Sex Differences in Cognition and Emotion

Note: These reviews support the statement by Harvard president Lawrence Summers in his NBER talk that there are statistical differences between the sexes in many measures of cognition and temperament. Moreover, they report several kinds of evidence suggesting that some part of these differences (though not all of them) are likely to be caused by biological differences: (a) cross-cultural prevalence or universality; (b) prevalence in other primates; (c) systematic relationships with changes in current hormone levels, both from normal fluctuations and from pathology or deliberate manipulation; (d) systematic relationships with differences in prenatal hormone levels, both from by normal variation and from pathology; (e) anatomical differences in the brains of the two sexes, including the distribution of receptors for hormones; (f) occurrence in children assigned a social gender that differs from their biological gender; (g) lack of measured differences in parenting practices or social expectations (other than those caused by actual differences between boys and girls), (h) patterns of strengths and weaknesses in the two sexes that do not correspond to any stereotype, implicit or explicit, (i) differences in women with Turner's syndrome depending on whether their X-chromosome was maternally or paternally imprinted.

Baron-Cohen, S. (2003). *The essential difference: The truth about the male and female brain*. New York: Basic Books.

Baron-Cohen, S. (2004). *Prenatal testosterone in mind: Amniotic fluid studies*. Cambridge, MA: MIT Press.

Blum, D. (1997). *Sex on the brain: The biological differences between men and women*. New York: Viking.

Geary, D. C. (1998). *Male, female: the evolution of human sex differences*. Washington, DC: American Psychological Association.

Halpern, D. (2000). *Sex differences in cognitive abilities* (3rd ed.). Mahwah, NJ: Erlbaum.

Kimura, D. (1999). *Sex and cognition*. Cambridge, MA: MIT Press.

Mealey, L. (2000). *Sex differences: Developmental and evolutionary strategies*. New York: Academic Press.

2. Recent Studies Showing Greater Male Variability in Psychological Traits, Including Mathematical Performance

Benbow, C. P. (1988). Sex differences in mathematical reasoning ability among the intellectually talented. *Behavioral and Brain Sciences*, *11*, 169-183, 225-232.

Benbow, C. P., Lubinski, D., Shea, D. L., & Eftekhari-Sanjani, H. (2000). Sex differences in mathematical reasoning ability: Their status 20-years later. *Psychological Science*, *11*, 474-480.

Cole, N. (1997) *The ETS Gender Study: How Females and Males Perform in Educational Settings*. Princeton, N.J.: Educational Testing Service. p. 10.

Hedges, L. V. and Nowell, A., Sex Differences in Mental Test Scores, Variability, and Numbers of High-scoring Individuals. *Science* 269 (1995): 41-45

Lubinski, D. & Benbow, C. Gender Differences in Abilities and Preferences among the Gifted: Implications for the Math-science Pipeline. *Current Directions in Psychological Science* 1 (1992): 61-66.

Willingham, W. W. & Cole, N. S. 1997. *Gender and fair assessment*. Mahwah, NJ: Erlbaum.

3. A Recent Review of Sex Differences in Risk Taking

Byrnes, J. P., Miller, D., C., & Schafer, W. D. 1999. Gender differences in risk-taking: A meta-analysis. *Psychological Bulletin*, 125, 367-383.

4. Reviews of Sex Differences in Actual and Desired Time Commitments for Work

Lubinski, D. Introduction to the Special Section on Cognitive Abilities: 100 Years After Spearman's (1904) "General Intelligence, Objectively Determined and Measured" *Journal of Personality and Social Psychology: Personality Processes and Individual Differences (JPSP: PPID)*, 86, 96-199. See especially p. 107, Figure 4: a follow-up of a large sample of mathematically gifted youth:

Browne, K. 1998. *Divided labors*. New Haven: Yale University Press.

5. References on Sex Differences in Children's Play Parenting and Playing with Toys

Sandberg, D. E. & Meyer-Bahlburg, H. F. L. 1994. Variability in middle childhood play behavior: Effects of gender, age, and family background. *Archives of Sexual Behavior*, 23, 645-663.

Hutt, C. 1972. Sex differences in human development. *Human Development*, 15, 153-170.

Pitcher, E. G. & Schultz, L. H. 1983. *Boys and girls at play: The development of sex roles*. South Hadley, MA: Bergin & Garvey.

Evidence that the pattern is prevalent in other cultures:

Eibl-Eibesfeldt, I. 1989. *Human ethology*. New York: Aldine de Gruyter. see especially p. 590.

Evidence that the pattern is affected by prenatal hormones:

Collaer, M. L. & Hines, M. 1995. Human behavioral sex differences: A role for gonadal hormones during early development? *Psychological Bulletin*, 118, 55-107.

Berenbaum, S. A. & Hines, M. 1992. Early androgens are related to childhood sex-typed toy preferences. *Psychological Science*, 3, 203-206.

Berenbaum, S. A. & Snyder, E. 1995. Early hormonal influences on childhood sex-typed activity and playmate preferences: Implications for the development of sexual orientation. *Developmental Psychology*, 31, 31-42.

Evidence that the pattern is present in other primates:

Nicholson, N. A. 1987. Infants, mothers, and other females. In B. B. Smuts, D. L. Cheney, R. M. Wrangham, & Struhsaker, T. T. (Eds.), *Primate societies*. Chicago: University of Chicago Press.

6. Studies of Unanticipated Gender Differences in Israeli Kibbutzim

Tiger, L. & Shepher, J. 1975. *Women in the kibbutz*. New York: Harcourt Brace Jovanovich.

Spiro, M. E. 1996. *Gender and culture: Kibbutz women revisited*. New Brunswick, NJ: Transaction.

7. Reviews Suggesting Few Differences between Parenting of Boys and Girls by Contemporary North American Parents:

Geary, D. 1998. *Male, female: The evolution of human sex differences*. Washington, DC: American Psychological Association. Pp. 251-256.

Lytton, H. & Romney, D. M. 1991. Parents' differential socialization of boys and girls: A meta-analysis. *Psychological Bulletin*, 109, 267-296.

Reviews Suggesting Meager Effects of Parenting Practices on Grown Children's Personality and Intelligence

Harris, J. R. 1995. Where is the child's environment: A group socialization theory of development. *Psychological Review*, 102, 458-489.

Harris, J. R. 1998. *The Nurture Assumption: Why Children Turn Out the Way They Do*. New York: Free Press.

Reiss, D., Neiderhiser, J. M., Hetherington, E. M., & Plomin, R. (2000). *The relationship code: Deciphering genetic and social influences on adolescent development*. Cambridge, MA: Harvard University Press.

Rowe, D. 1994. *The limits of family influence: Genes, experience, and behavior*. New York: Guilford Press.

Turkheimer, E. (2000). Three laws of behavior genetics and what they mean. *Current Directions in Psychological Science*, 5, 160-164.