



White A., Erskine S., and Seims A
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4. Understanding women and their health

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4.1 Being born a female

From conception there are important biological differences between females and males that impact on their health and wellbeing for the rest of their lives. The difference between males and females is based on whether they have the female XX chromosome or the male XY chromosome. This has an effect on the basic anatomy and physiology of the body and has an influence on nearly every aspect of how the body functions.

The girl embryo has a greater chance of surviving to birth and tends to have less congenital abnormalities [1]. Girls are more mature than boys at birth, both physically and cognitively and have a more rapid growth into independence than boys, with better self-help skills (such as dressing themselves), fine motor skills (such as turning pages in a book), and overall movement skills (such as moving around without bumping into things). Although boys are better at gross motor skills, such as running and throwing a ball [2]. Girls tend to have better language performance than boys from early childhood, both written and verbal, with links made to different inherent neural pathways in younger girls as compared to boys [3,4] [see also [5]].

Although boys are more likely to suffer from developmental disorders, such as autism and attention deficit hyperactivity disorder (ADHD), there is now a growing awareness of how these conditions materialise in girls. With better screening, many more girls (and previously un-diagnosed women) who are affected are being identified as in need of support [6–10]. NICE (2018b) has recognised that girls and women with ADHD can have poor social skills, with resulting social isolation leading to a negative impact of their self-esteem and well-being.

Historically there has been a lack of research that exploring disease states and their management in women, tending to rely on young, mostly White, males for pharmacological studies and working on an assumption that any results could be extrapolated to women, older men and different ethnic groups. We are only just starting to understand the female form, with early researchers being reluctant to explore female anatomy resulting in a very limited knowledge being gained of the female sex organs [11–13].

What is emerging is that there are important differences between the anatomy and physiology of men and women that go beyond reproductive issues. The structure of the heart differs between the sexes - women have a smaller heart and coronary artery vessels, which is more sensitive to changes and reacts differently to cardiovascular disease states than men [14–16]. Women's smaller lungs, different ventilation patterns and the effects of sex hormones can impact on the development of respiratory problems, such as asthma and COPD [17,18]. Fat deposition is mostly in women's hips and thighs, which is actually beneficial for health, but obesity in women leads to visceral fat, which has a more damaging effect [19,20].

Women have a stronger immune response through their sex hormones being immune-enhancing, whilst testosterone is immunosuppressive. The process by which this occurs appears to be mostly a result of hormonal influence, but also through the X chromosomes [21,22]. This enhanced immune response can be of benefit, with a decreased risk of some cancers through swifter and more efficient removal of pathogens [23], but it can also lead to an increased risk of autoimmune related disorders when the system malfunctions, including rheumatoid arthritis, multiple sclerosis, ulcerative colitis, Crohn's disease, and thyroid disease [24,25]. Women are at greater risk of both under active thyroid [26] and over active thyroid [27], both of which can be a result of disordered immune system activity. Fibromyalgia (FM), is also linked to problems with the immune system [28], with over 7 times more women affected than men [29].

There has been a wide debate on whether there are structural differences in the brain, with some studies suggesting greater linkages between the right and left hemisphere. However, other studies explain such differences as being the result of brain plasticity and the effect of socio-cultural conditioning [30–33]. What has been shown is that the female brain matures more quickly, with the neural pruning required to remove the unnecessary linkages developed through childhood to allow for more processed thought patterns happening earlier in women [34].

There are other biological differences that are not covered in the report, such as migraine, which is three times more prevalent in women, with more severe

symptoms [35]. Urinary tract infections (cystitis) are also more common in women due to the shorter urethra, and can cause chronic long term problems as well as more frequent acute episodes [36]. It is estimated that 1 in 3 people over the age of 65 years will suffer from dry eye syndrome / disease [37], as a result of reduced tear production, this is 1½ to 3 times more common in women and is mostly seen in menopausal and post-menopausal women as a result of hormone changes [38].

4.2 Growing up as a girl and living as a woman

The socio-cultural implications of being a female has a powerful influence on the life of a girl from birth onwards. The toys that are focused onto boys and girls, the gender stereotypical clothes, and the way we interact with the girl and boy child can affect how they see themselves and how they come to realise their place in the world. This continues through stories, film and TV, and is pervasive across cultures and ethnicities [39–42].

It is very important to note however, that there are problems discussing social development, as there will always be exceptions as each generation meets a new world order. What is acceptable now might not have been in the generations that have gone before, and we are all affected in one way or another by the social determinants of health and those intersectional factors such as ethnicity and sexuality that can have a powerful effect on how girls and women see their life. However, this section is included to give an idea of the powerful social processes that impact on our children and continue through our lives.

From pre-school onwards children are exposed to pressures to conform to existing stereotypes of boyhood and girlhood, with family, peers and teachers acting as powerful influencers [43,44]. Studies with pre-school children already reveal girls and boys are aware of these messages, girls and boys have been found to play differently from early pre-school, with boys and girls tending to stay in their own same-sex groups and being wary of the opposite sex [45,46]. Boys tend to be more engaged in activities, such as football, and be more 'boisterous' and physical with each other. Girls play is more likely to be based around communication and emotions, building intimacy through shared secrets [47].

This socialisation process has also been found to result in girls believing that boys have gendered power over their bodies and that heterosexual relationships are 'normal' [48,49]. These early experiences can feed into girl's aspirations and their willingness to do things that boys do, including school subjects such as mathematics and sciences.

Girls enter into puberty at an earlier age than boys, often whilst still in primary school, with 56% of girls (41% boys) starting puberty by age 11 and 10% also starting menstruation [50]. This means they are past their main growing phase before they reach high school, but also means they have to come to terms with their new bodies and emotions at an earlier age than boys. It has been suggested that puberty and the onset of the menarche should be regarded as a public health issue, as many girls are negatively affected by what they experience, including feeling ashamed and afraid. This impacts on their self-confidence and willingness to engage in activities, which is especially the case when they are unprepared, or face significant physical discomfort [51–54]. The effects are also more pronounced when puberty occurs early, which is more likely to occur in socio-economically deprived girls and from some ethnic groups [55,56].

Earlier puberty and a more rapid maturation process than seen in boys also means that they are always a step ahead of their peer group boys, resulting in girls tending to socialise with other girls and be attracted to older boys (if hetero/bi sexual). Sexual problems can originate during adolescence and have a longer term impact, with girls as likely to experience problems as boys [57].

There is some evidence that girls and women are more attuned to non-verbal cues and are quicker at determining the emotional state of others compared to men [58–60]. They are also more likely to have longer eye contact and take a wider appraisal of another person than seen in men [61,62]. It is difficult to tell whether this emotion processing skill is a result of biological differences or female socialisation [58], but it can result in women being quicker at making a judgement, and may also explain why men may be seen to be slower at responding to cues.

The socialisation process continues through adolescence, through peer pressure, and the influence of parents and school [63]. The Global Early Adolescent Study¹, which explores the experiences of children from age 10 through to 18, has found almost universal gendered pressure on girls and boys to conform to social stereotypes, which include:

- The hegemonic myth: There is a global set of forces from schools, parents, media, and peers themselves that reinforce the hegemonic myths that girls are vulnerable and that boys are strong and independent.
- Pubertal girls are the embodiment of sex and sexuality: Messages such as—do not sit like that, do not wear that, do not talk to him, boys will ruin your future—support the gender division of power and affect while promote sex segregation to preserve girl's sexuality.
- Cover up and do not go out: As a consequence of adult perceptions of female sexual vulnerability, girls' mobility is far more restricted than for boys.
- Boys are trouble: Because of adult concerns about their sexual vulnerability, girls are repeatedly told to stay away from boys and there are sanctions if they do not—punishment, social isolation, sexual rumour, and innuendo.
- Both boys and girls are aware of gender nonconforming peers: Young people (as well as a number of parents) spoke of peers whose interests, appearance, dress, and/or appearance was more typical of the opposite sex than their own. [64] (p53-54)

However, change is happening for young girls in a way that is not being seen with boys, with girls able to engage in male sports and pastimes, having a wider selection of clothes to wear (that might have been classed as 'boyish') and adopting 'laddish' lifestyles [65,66]. This is bringing new opportunities, but also introducing new challenges as increasing levels of harmful alcohol intake, for instance, is presenting new health risks. In part, the one-sided wish to change is an effect of girls having greater curbs on their freedom than boys, so boys are not as motivated to challenge gender stereotypes and inequalities, particularly as boys also risk facing more severe consequences from their peers if they try and move away from the norm [63,64].

¹ <http://www.geastudy.org>

Despite, these advances social pressure continues on women through their adulthood, with stereotypical expectations of being the ideal mother and partner and care giver, whilst maintaining the home and being successful in the workplace [67–70]. Living with the reality of violence also blights many lives, bring with it both personal risk and also limitations on activities through fear of what might happen [71].

There are significant socio-cultural implications for women as they age. For those women whose working years were restricted due to caring responsibilities and part-time work, they are now entering into their older years with limited savings and pension, and a greater likelihood of poverty. Women are also exposed to negative representations of older women and ageist and sexist stereotyping that can negatively impact on their self-esteem and willingness to fully engage in activities [72].

For many, these pressures are the result of living in a very gender-unequal world, where women are faced with trying to match their expectations for a fulfilling life in a society that is still driven by a patriarchal dominance. This is harmful to both women and men as it creates undue pressure on both sexes. Nevertheless, many girls and women in Leeds are proving that change can happen and that we can have a different vision of a gendered society. Much can be done to help re-shape the social order, such as seen when gender-transformative policy changes are adopted, for example the Inclusive Growth Strategy in Leeds. It also requires schools and workplaces to be more vigilant in how they portray gender stereotypes and how they support opportunities for change and alternative life-ways.

Case study 1 Clare

Clare¹ was referred to the Women's Lives Leeds Complex Needs Service in October 2017.

The young woman was identified as being a risk to herself as well as at risk from others, particularly around Child Sexual Exploitation (CSE). She was on a Child in Needs (CIN) plan and had a Children's Social Care Worker (CSWS) worker. The young woman identified that she used alcohol and drugs but did not have a good understanding of their effects. She also recognised that she needed support to increase her knowledge of sexual health and to develop her confidence, self-esteem and managing her mental and emotional health. She identified that she was not very happy in school or in her community and wanted to learn how to better resist peer pressure.

The young woman's attendance at school had deteriorated over the past 12 months and she would regularly run away or stay out without notifying her family therefore the Police became involved. She had witnessed domestic abuse in the family home and work has been ongoing with the parent around positive parenting. The Women's Lives Leeds worker and young woman identified what needed to go in the support plan and over the following year addressed the areas within the plan, until Clare exited the service 1 year later.

The young woman engaged well with the worker from the beginning and was happy to receive support. Other workers supporting the young woman commented on what a positive experience it had been:

"Your work with X is the first time she has engaged meaningfully with any service we have offered her, so it's really positive that she is participating with you."

"The young woman has engaged positively with the WLL worker and agreed to attend their sessions, this is brilliant for her"

The young woman engaged well with the sessions and said: *"I do stuff my own way and not how other people tell me. I listen to everything. My worker has encouraged me to think for myself and be myself."*

The young woman identified that it was important for her to have a female worker. *I can talk to a woman more. It's just weird talking to a boy about stuff that you don't want to talk about.*

¹ Name change

References

1. Sokal R, Tata LJ, Fleming KM. Sex prevalence of major congenital anomalies in the United Kingdom: A national population-based study and international comparison meta-analysis. *Birth Defects Res Part A - Clin Mol Teratol.* 2014;100:79–91.
2. Moser T, Reikerås E. Motor-life-skills of toddlers – a comparative study of Norwegian and British boys and girls applying the Early Years Movement Skills Checklist. *Eur Early Child Educ Res J.* Taylor & Francis; 2016;24:115–35.
3. Burman DD, Bitan T, Booth JR. Sex differences in neural processing of language among children. *Neuropsychologia.* 2008;46:1349–62.
4. Özçalışkan Ş, Goldin-Meadow S. Sex differences in language first appear in gesture. *Dev Sci.* 2010;13:752–60.
5. Alexander GM, Wilcox T. Sex Differences in Early Infancy. *Child Dev Perspect* [Internet]. 2012;6:400–6. Available from: <http://dx.doi.org/10.1111/j.1750-8606.2012.00247.x>
6. Kanfisz L, Davies F, Collins S. 'I was just so different': The experiences of women diagnosed with an autism spectrum disorder in adulthood in relation to gender and social relationships. *Autism.* 2017;21:661–9.
7. Parish-Morris J, Liberman MY, Cieri C, Herrington JD, Yerys BE, Bateman L, et al. Linguistic camouflage in girls with autism spectrum disorder. *Mol Autism.* 2017;8:1–13.
8. Gould J. Towards understanding the under-recognition of girls and women on the autism spectrum. *Autism.* 2017;21:703–5.
9. NICE. Attention Deficit Hyperactivity Disorder (update) [Internet]. Nimbh. London: National Institute for Health and Clinical Excellence; 2018. Available from: <https://www.nice.org.uk/guidance/ng87/evidence/a-risk-factors-pdf-4783686301>
10. Henry E, Hill Jones S. Experiences of Older Adult Women Diagnosed with Attention Deficit Hyperactivity Disorder. *J Women Aging* [Internet]. 2011;23:246–62. Available from: <http://www.tandfonline.com/doi/abs/10.1080/08952841.2011.589285>
11. Puppo V, Puppo G. Anatomy of sex: Revision of the new anatomical terms used for the clitoris and the female orgasm by sexologists. *Clin Anat.* 2015;28:293–304.
12. Pauls RN. Anatomy of the clitoris and the female sexual response. *Clin Anat.* 2015;28:376–84.
13. Ah-King M, Barron AB, Herberstein ME. Genital Evolution: Why Are Females Still Understudied? *PLoS Biol.* 2014;12:1–7.
14. Papakonstantinou N a., Stamou MI, Baikoussis NG, Goudevenos J, Apostolakis E. Sex differentiation with regard to coronary artery disease. *J Cardiol* [Internet]. Japanese College of Cardiology; 2013;62:4–11. Available from: <http://linkinghub.elsevier.com/retrieve/pii/S0914508713000919>
15. Regitz-Zagrosek V, Karaigas G. Mechanistic Pathways of Sex Differences in Cardiovascular Disease. *Physiol Rev.* 2017;97:1–37.
16. EUGenMed, Group CCS, Regitz-Zagrosek V, Oertelt-Prigione S, Prescott E, Franconi F, et al. Gender in cardiovascular diseases: impact on clinical manifestations, management, and outcomes. *Eur Heart J* [Internet]. 2016;37:24–34. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26530104>
17. Pinkerton KE, Harbaugh M, Han MK, Jourdan Le Saux C, Van Winkle LS, Martin WJ, et al. Women and Lung Disease. Sex Differences and Global Health Disparities. *Am J Respir Crit Care Med* [Internet]. 2015;192:11–6. Available from: <http://www.atsjournals.org/doi/10.1164/rccm.201409-1740PP>
18. Townsend EA, Miller VM, Prakash YS. Sex differences and sex steroids in lung health and disease. *Endocr. Rev.* 2012.
19. Wu B, Huang J, Fukuo K, Suzuki K, Yoshino G, Kazumi T. Different Associations

- of Trunk and Lower-Body Fat Mass Distribution with Cardiometabolic Risk Factors between Healthy Middle-Aged Men and Women. *Int J Endocrinol*. Hindawi; 2018;
20. Kapoor E, Collazo-Clavell ML, Faubion SS. Weight Gain in Women at Midlife: A Concise Review of the Pathophysiology and Strategies for Management. *Mayo Clin Proc* [Internet]. Mayo Foundation for Medical Education and Research; 2017;92:1552–8. Available from: <http://dx.doi.org/10.1016/j.mayocp.2017.08.004>
21. Rubtsov A V, Rubtsova K, Kappler JW, Marrack P. Genetic and hormonal factors in female-biased autoimmunity. *Autoimmun Rev* [Internet]. Elsevier B.V.; 2010 [cited 2013 Aug 31];9:494–8. Available from: <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=3171140&tool=pmcentrez&rendertype=abstract>
22. Ortona E, Pierdominici M, Maselli A, Verona C, Aloisi F, Shoenfeld Y. Sex-based differences in autoimmune diseases. *Ann Ist Super Sanità*. 2016;52:205–12.
23. Dorak MT, Karpuzoglu E. Gender differences in cancer susceptibility: an inadequately addressed issue. *Front Genet*. 2012 Nov 2. 2012;3.
24. Roved J, Westerdahl H, Hasselquist D. Sex differences in immune responses: Hormonal effects, antagonistic selection, and evolutionary consequences. *Horm Behav* [Internet]. Elsevier Inc.; 2017;88:95–105. Available from: <http://dx.doi.org/10.1016/j.yhbeh.2016.11.017>
25. Klein SL, Flanagan KL. Sex differences in immune responses. *Nat Rev Immunol* [Internet]. Nature Publishing Group, a division of Macmillan Publishers Limited. All Rights Reserved.; 2016;16:626. Available from: <http://dx.doi.org/10.1038/nri.2016.90>
26. NHS. Under active thyroid (hypothyroidism) [Internet]. 2018. Available from: <https://www.nhs.uk/conditions/underactive-thyroid-hypothyroidism/>
27. NHS. Overactive thyroid (hyperthyroidism) [Internet]. 2016. Available from: <https://www.nhs.uk/conditions/overactive-thyroid-hyperthyroidism/>
28. Zhang Z, Feng J, Mao A, Le K, Placa D La, Wu X, et al. SNPs in inflammatory genes CCL11, CCL4 and MEFV in a fibromyalgia family study. *PLoS One*. 2018;13:1–16.
29. NHS. Fibromyalgia [Internet]. 2016. Available from: <https://www.nhs.uk/conditions/fibromyalgia/>
30. Vidal C. The Sexed Brain: Between Science and Ideology. *Neuroethics* [Internet]. 2011 [cited 2014 Aug 30];5:295–303. Available from: <http://link.springer.com/10.1007/s12152-011-9121-9>
31. Mills KL, Goddings A-L, Herting MM, Meuwese R, Blakemore S-J, Crone EA, et al. Structural brain development between childhood and adulthood: Convergence across four longitudinal samples. *Neuroimage* [Internet]. 2016;141:273–81. Available from: <http://linkinghub.elsevier.com/retrieve/pii/S1053811916303512>
32. de Vries GJ, Forger NG. Sex differences in the brain: a whole body perspective. *Biol Sex Differ* [Internet]. *Biology of Sex Differences*; 2015;6:15. Available from: <http://www.bsd-journal.com/content/6/1/15>
33. Dean DC, Planalp EM, Wooten W, Schmidt CK, Kecskemeti SR, Frye C, et al. Investigation of brain structure in the 1-month infant. *Brain Struct Funct* [Internet]. Springer Berlin Heidelberg; 2018;1–3. Available from: <http://dx.doi.org/10.1007/s00429-017-1600-2>
34. Lim S, Han CE, Uhlhaas PJ, Kaiser M. Preferential detachment during human brain development: Age- and sex-specific structural connectivity in diffusion tensor imaging (DTI) data. *Cereb Cortex*. 2015;25:1477–89.
35. Vetvik KG, MacGregor EA. Sex differences in the epidemiology, clinical features, and pathophysiology of migraine. *Lancet Neurol*. 2017;16:1234.

36. Katz L, Tripp DA, Carr LK, Mayer R, Moldwin RM, Nickel JC. Understanding pain and coping in women with interstitial cystitis/bladder pain syndrome. *BJU Int*. 2017;120:286–92.
37. NHS Choices. Dry eye syndrome [Internet]. 2016. Available from: <https://www.nhs.uk/conditions/dry-eyes/>
38. Baig MA, Faiz SA, Munir R. Dry Eye Disease and its Association with Menopause. *Ophthalmol Updat* [Internet]. 2018;16:507–10. Available from: <http://ezproxy.deakin.edu.au/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=127673441&authtype=sso&custid=deakin&site=eds-live&scope=site>
39. Halim ML, Ruble D, Tamis-Lemonda C, Shrout PE. Rigidity in gender-typed behaviors in early childhood: A longitudinal study of ethnic minority children. *Child Dev*. 2013;84:1269–84.
40. Halim ML, Ruble DN, Tamis-LeMonda CS, Zosuls KM, Lurye LE, Greulich FK. Pink frilly dresses and the avoidance of all things “girly”: Children’s appearance rigidity and cognitive theories of gender development. *Dev Psychol*. 2014;50:1091–101.
41. Halim MLD. Princesses and Superheroes: Social-Cognitive Influences on Early Gender Rigidity. *Child Dev Perspect*. 2016;10:155–60.
42. Coyne SM, Linder JR, Rasmussen EE, Nelson DA, Birkbeck V. Pretty as a Princess: Longitudinal Effects of Engagement with Disney Princesses on Gender Stereotypes, Body Esteem, and Prosocial Behavior in Children. *Child Dev*. 2016;87:1909–25.
43. Muntoni F, Retelsdrof J. Gender-specific teacher expectations in reading—The role of teachers’ gender stereotypes. *Contemp Educ Psychol* [Internet]. Elsevier; 2018;54:212–20. Available from: <https://doi.org/10.1016/j.cedpsych.2018.06.012>
44. Riley TA. Boys are like puppies, girls aim to please: How teachers’ gender stereotypes may influence student placement decisions and classroom teaching. *Alberta J Educ Res*. 2014;60:1–21.
45. Martin C, Ruble D. Children’s Search for Gender Cues: Cognitive Perspectives on Gender Development. *Curr Dir Psychol Sci*. 2004;13:67–70.
46. Halim MLD, Ruble DN, Tamis-LeMonda CS, Shrout PE, Amodio DM. Gender Attitudes in Early Childhood: Behavioral Consequences and Cognitive Antecedents. *Child Dev*. 2017;88:882–99.
47. Al-Attar G, De Meyer S, El-Gibaly O, Michielsen K, Animosa LH, Mmari K. “A Boy Would Be Friends With Boys ... and a Girl ... With Girls”: Gender Norms in Early Adolescent Friendships in Egypt and Belgium. *J Adolesc Heal* [Internet]. Elsevier Inc.; 2017;61:S30–4. Available from: <http://dx.doi.org/10.1016/j.jadohealth.2017.03.013>
48. Gansen HM. Reproducing (and Disrupting) Heteronormativity: Gendered Sexual Socialization in Preschool Classrooms. *Sociol Educ* [Internet]. 2017;90:255–72. Available from: <http://journals.sagepub.com/doi/10.1177/0038040717720981>
49. Myers K, Raymond L. Elementary school girls and heteronormativity: The girl project. *Gend Soc*. 2010;24:167–88.
50. Mayhew E, Bradshaw J. Millennium Cohort Study: Initial findings from the Age 11 survey [Internet]. London: Centre for Longitudinal Studies Institute of Education; 2014. Available from: <http://www-users.york.ac.uk/~jrb1/documents/millenniumcohort.pdf>
51. Sommer M, Sutherland C, Chandra-Mouli V. Putting menarche and girls into the global population health agenda. *Reprod Health*. 2015;12:10–2.

52. You Gov UK. Fear going to school less report [Internet]. 2018 [cited 2018 Nov 20]. Available from: <https://www.bodyform.co.uk/our-world/fear-going-to-school-less/>
53. Maphalala A. Adolescent heavy menstrual bleeding and dysmenorrhoea. *Obstet Gynaecol Forum*. 2018;28:11–5.
54. The Lancet. Normalising menstruation, empowering girls. *Lancet Child Adolesc Heal* [Internet]. Elsevier Ltd; 2018;2:379. Available from: [http://dx.doi.org/10.1016/S2352-4642\(18\)30143-3](http://dx.doi.org/10.1016/S2352-4642(18)30143-3)
55. Kelly Y, Zilanawala A, Sacker A, Hiatt R, Viner R. Early puberty in 11-year-old girls: Millennium Cohort Study findings. *Arch Dis Child*. 2017;102:232–7.
56. Belsky J, Ruttle PL, Boyce WT, Armstrong JM, Essex MJ, Belsky J, et al. Early Adversity, Elevated Stress Physiology, Accelerated Sexual Maturation, and Poor Health in Females. *Dev Psychopathol*. 2015;51:816–22.
57. O’Sullivan LF, Byers ES, Brotto LA, Majerovich JA, Fletcher J. A Longitudinal Study of Problems in Sexual Functioning and Related Sexual Distress Among Middle to Late Adolescents. *J Adolesc Heal* [Internet]. Elsevier Inc.; 2016;59:318–24. Available from: <http://dx.doi.org/10.1016/j.jadohealth.2016.05.001>
58. Wingenbach TSH, Ashwin C, Brosnan M. Sex differences in facial emotion recognition across varying expression intensity levels from videos. *PLoS One*. 2018;13.
59. Thompson AE, Voyer D. Sex differences in the ability to recognise non-verbal displays of emotion: A meta-analysis. *Cogn Emot*. 2014;28:1164–95.
60. Gulabovska M, Leeson P. Why are Women Better Decoders of Nonverbal Language? *Gender Issues*. 2014;31:202–18.
61. Heisz JJ, Pottruff MM, Shore DI. Females Scan More Than Males: A Potential Mechanism for Sex Differences in Recognition Memory. *Psychol Sci*. 2013;24:1157–63.
62. Hall JK, Hutton SB, Morgan MJ. Sex differences in scanning faces: Does attention to the eyes explain female superiority in facial expression recognition? *Cogn Emot*. 2010;24:629–37.
63. Kågesten A, Gibbs S, Blum RW, Moreau C, Chandra-Mouli V, Herbert A, et al. Understanding factors that shape gender attitudes in early adolescence globally: A mixed-methods systematic review. *PLoS One*. 2016;11:1–36.
64. Blum RW, Mmari K, Moreau C. It Begins at 10: How Gender Expectations Shape Early Adolescence Around the World. *J Adolesc Heal* [Internet]. Society for Adolescent Health and Medicine; 2017;61:S3–4. Available from: <http://linkinghub.elsevier.com/retrieve/pii/S1054139X17303555>
65. Yu C, Zuo X, Blum RW, Tolman DL, Kågesten A, Mmari K, et al. Marching to a Different Drummer: A Cross-Cultural Comparison of Young Adolescents Who Challenge Gender Norms. *J Adolesc Heal* [Internet]. Elsevier Inc.; 2017;61:S48–54. Available from: <http://dx.doi.org/10.1016/j.jadohealth.2017.07.005>
66. Dobson AS. “Sexy” and “Laddish” Girls [Internet]. *Fem. Media Stud*. Taylor & Francis; 2014. p. 253–69. Available from: <http://dx.doi.org/10.1080/14680777.2012.713866>
67. Thomas CL, Laguda E, Olufemi-Ayoola F, Netzley S, Yu J, Spitzmueller C. Linking Job Work Hours to Women’s Physical Health: The Role of Perceived Unfairness and Household Work Hours. *Sex Roles*. *Sex Roles*; 2018;1–13.
68. Meeussen L, VanLaar C. Feeling pressure to be a perfect mother relates to parental burnout and career ambitions. *Front Psychol*. 2018;9.
69. Henderson A, Harmon S, Newman H. The Price Mothers Pay, Even When They Are Not Buying It: Mental Health Consequences of Idealized Motherhood. *Sex Roles*

[Internet]. *Sex Roles*; 2016;74:512–26. Available from:

<http://dx.doi.org/10.1007/s11199-015-0534-5>

70. WHO. Women's health and well-being in Europe: beyond the mortality advantage [Internet]. Copenhagen; 2016. Available from:

http://www.euro.who.int/__data/assets/pdf_file/0006/318147/Womens-health-well-being-Europe-beyond-mortality-

[advantage.pdf?ua=1%5Cnhttp://www.euro.who.int/__data/assets/pdf_file/0006/318147/Womens-health-well-being-Europe-beyond-mortality-advantage.pdf](http://www.euro.who.int/__data/assets/pdf_file/0006/318147/Womens-health-well-being-Europe-beyond-mortality-advantage.pdf?ua=1%5Cnhttp://www.euro.who.int/__data/assets/pdf_file/0006/318147/Womens-health-well-being-Europe-beyond-mortality-advantage.pdf)

71. FRA. Violence against women: an EU wide survey - Main results [Internet].

Luxembourg: European Union Agency for Fundamental Rights; 2014. Available from:

<http://fra.europa.eu/en/publication/2014/violence-against-women-eu-wide-survey-main-results-report>

72. Quéniart A, Charpentier M. Older women and their representations of old age: A qualitative analysis. *Ageing Soc.* 2012;32:983–1007.