

Biological factors in the formation of gender roles. essay sample

[Health & Medicine](#), [Sex](#)



As people grow older they began to develop more complex ideas about gender. This includes their sense of gender identity as well as their knowledge of gender roles. Gender identity is one's sense of being male or female. By the age of two, most children can correctly label their own or another person's sex or gender. Between the ages of 3 1/2 to 7, children grasp the idea that a person's biological characteristics are fixed and the person will remain male or female, called gender constancy.

Development of gender identity is a step towards assuming a gender role, which is a set of expected behaviors for males and for females.

Men and women tend to occupy different social roles and most cultures have certain ideas of what types of behaviors are typical and appropriate for each sex. Anthropologists Whiting and Edwards (1973) studied children in Kenya, Japan, India, the Philippines, Mexico, and the US. In the majority of these societies, girls were more nurturing and made more physical contact. Boys were more aggressive, dominant, and engaged in more rough and tumble play. Biological factors such as testosterone have been shown to greatly affect the formation and development of gender roles.

According to the theory of psychosexual differentiation, gender roles are formed because humans are born with innate predispositions to act and feel like males or females. This is largely due to the masculinizing effects of testosterone on the brain. Prenatal exposure to hormones is the most important factor in the development of gender identity, and socialization plays a subsidiary role as well. Biological differences between boys and girls originates with genetic sex, which is determined by chromosomes (XX

for girls and XY for boys). During prenatal development, sex hormones are released, causing the external genitals and in general reproductive organs of the fetus to become male or female. It is the presence or absence of male hormones, called androgens, that make a difference in psychosexual differentiation. Some researchers argue that testosterone has a masculinization effect on the brain of the developing child.

This may explain behavioral differences, in addition to gender identity.

Testosterone is key to developing the body as well as mind. Prenatal exposure establishes male brain circuitry and inhibits development of female brain circuits. Support for this theory is found in research with animals.

Female rat fetuses injected with testosterone later behaved like male rats.

They do not exhibit normal female behavior in adulthood, even if given injections of this estrogen at that time. Congenital adrenal hyperplasia (CAH) is a condition resulting from prenatal exposure to male androgens.

Berenbaum and Snyder (1995) found that girls with CAH showed a significantly greater preference for boys' toys and activities, while boys of the same condition did not differ significantly from the non-CAH group in any way.

The effect of testosterone on the formation of gender roles can be demonstrated with a Auyeung et al.'s (2009) study investigating the effects of prenatal exposure to testosterone on juvenile play behavior. Participants were recruited from a longitudinal study of the effects of fetal testosterone on child development. On mothers had undergone an amniocentesis and had given birth to a healthy infant. Complete information was obtained for 112

male and 100 female offspring. Mothers completed questionnaires about the child's activities and interests. Higher scores reflected more male typical behavior.

Those exposed to higher levels of testosterone tended to engage in higher levels of physical activity. There was a significant correlation between fetal testosterone and sexually differentiated play behavior in both girls and boys. While two previous studies did not detect this relationship, the large sample and specific measures used may have accounted for this study's ability to detect a relationship. Because children were developing typically and because measures of testosterone were taken directly from the fetal environment, the results strengthen the evidence that testosterone plays a role in the sexual differentiation of human behavior.

Swaab and Fliers (1985) demonstrated the effects of testosterone on gender role development by showing how it acts on the hypothalamus and masculinizes the brain. The researchers scanned the brains of 13 males and 18 females aged between 10 and 93. They identified an area of the hypothalamus called the "sexually dimorphic nucleus," which was around 2 1/2 times larger on average in males than females. It is thought that prenatal hormones masculinize the male brain even though sex differences in brain structure cannot be detected until the age of around six years old. While the study is good in the sense that it uses a wide range of ages of people, not many people were used, which makes it hard to generalize to the larger population. More research like this needs to be done on the role of testosterone on behavior before it can fully be accepted.

While there is clear evidence for the role of large biological factors like exposure to testosterone on the development of gender roles, much consideration of other factors must be taken into account. The impact of sex hormones on gender roles is debatable. While studies with rats indicate that high levels of prenatal testosterone may be linked with masculine behavior patterns, studies that human children have been less supportive. Biological theories also fail to take into account the influence of cognitive and sociocultural factors. The biosocial theory of gender development (theory of "gender neutrality") sees the interaction between biological and social factors as important. It views socialization as the most important factor in the formation of gender identity and adherence to general.

Money and Ehrhardt cleaned the biological factors, such as hormones, in combination with have a child is labeled sexually, determines how the child is socialized. Money based his theory on case studies of individuals born with ambiguous genitalia. There are huge questions about generalizability and if these cases can be used to say something more general about the development of gender identity. For example, the case of David Reimer intended to support biological theories but actually supports psychosexual theory. It proved that even though his genitalia was changed and he was treated like a girl, he still felt like a boy inside.