

PSYCHOLOGY

The British Psychological Society
OPEN LEARNING UNITS
Developmental Psychology

Sex, Gender and Identity

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GENERAL LEARNING OBJECTIVES OF THIS UNIT

This Open Learning Unit will provide you with all the core information you need to answer an examination question or to write an essay on gender-role development. It will take four to five hours to read through, though it may well take you longer if you attempt all the suggested activities.

By the end of this Unit you should:

- ▷ be familiar with some of the evidence for gender differences in behaviour and cognition (thinking) and be able to evaluate research evidence;
- ▷ be familiar with the development of children's understanding of gender, including gender identity and awareness of sex stereotypes;
- ▷ be aware of some of the problems involved in researching gender-role development;
- ▷ know the main theories which have been proposed to explain gender-role development and be able to compare and contrast them;
- ▷ be familiar with some of the evidence in support of, and against, these theories;
- ▷ appreciate the complexity of gender-role development and be able to give an integrated account.

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1

Sex, Gender and Identity

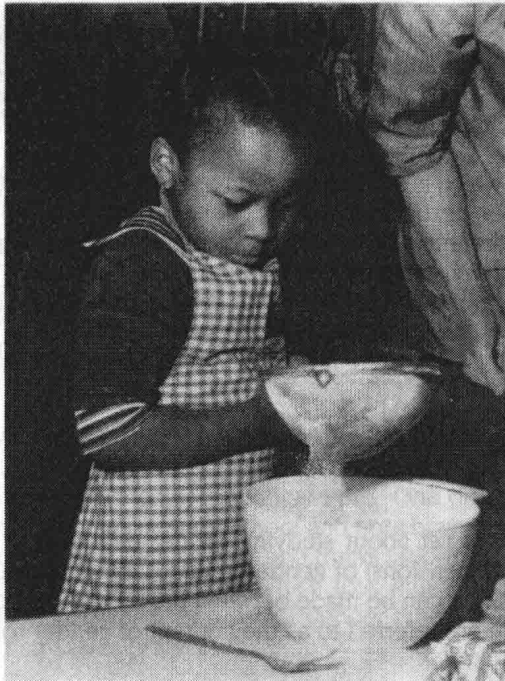
KEY AIMS: By the end of this Part you should:

- understand the distinction between sex and gender
- be familiar with the methods used to study gender differences
- be aware of approaches used to assess research evidence.

Why study gender-role development?

Our lives are greatly influenced by the type of occupation we choose, by our friends and by our attitudes and values. Such choices are very much influenced by what are termed **gender roles** – ways of behaving that are socially prescribed for males and females in a culture at any point in its history. For example, it is accepted that the vast majority of secretaries in Britain today are female, just as it is accepted that most soldiers are male. However, a century ago most of the work done by today's secretaries was performed by male clerks, and in some cultures women go into battle. Similarly, in Europe many waiters are male; in the UK – with the exception of top hotels – they are predominantly female, and in Japan men never wait on table.

How do such gender roles develop? This is a key question for theories which attempt to explain social and personality development. It is also a key focus of debate in the so-called '**nature/nurture**' controversy, a dispute between those who argue that all human skills and attributes are inborn (the 'nature' argument) and those who believe that they are learned (the 'nurture' argument). Most scientists now recognize that this either/or approach is inadequate and stress the mutual influences between the environment and heredity throughout development. We will return to these issues throughout the course of this Unit.



Research on gender-role development (also known as gender-typing or sex-typing) both influences, and is influenced by, popular debates about gender roles. In earlier decades strong division between the sexes was considered a desirable goal of socialization by most psychologists, educators and parents. For example, women were taught skills to prepare them for the roles of housewife and mother, men were educated for the roles of wage-earner and head of the household. More recently that assumption has been questioned, mainly because gender typing is seen (a) as a means of discrimination against women and (b) may restrict personal development for both males and females.



Do you think men and women should occupy clearly defined and distinct roles in society? What purposes might this serve?



Do you see gender-typing as a means of discrimination against women, or as restricting the potential development of both men and women?

Definitions of sex and gender

In general, the term **sex** is used to refer to the *biological* categories of 'male' and 'female', and **gender** to refer to the *social* categories of 'masculine' and 'feminine', that is, attributes, characteristics and behaviour which are ascribed mainly to one of the sexes only. The ways in which sex and gender are commonly classified are shown in Table 1. Biological sex in humans is assigned by chromosomes and genitals. Gender is socially defined. **Gender role** (the common usage is **sex role**, but gender role is consistent with our definition) typically refers to behaviours, interests and tasks socially-defined as appropriate for males or females; **gender identity** refers to an individual's self-concept of his or her sex. We will discuss these terms later.

TABLE 1. Principal classifications of sex and gender

Biological sex	<i>is classified as</i>	female and male
Gender identity	<i>is classified as</i>	woman/girl and man/boy
Gender role	<i>is classified as</i>	feminine and masculine

For many individuals, these three categories more or less map on to each other, particularly biological sex and gender identity. For example, a biological female is likely to think of herself as a girl or woman (although, as we shall see in Part 4, this is not necessarily so) but she may or may not have a feminine role.

Another distinction, which is sometimes seen as related to these three categories, is **sexual identity** (or sexual orientation). Sexual identity is primarily classified into homosexual (a preference for one's own sex) and heterosexual (a preference for the other sex) but there are other orientations (e.g., bisexual). Commonly it is believed that sexual orientation is linked with gender identity and gender role – for example that a homosexual man is likely to have a feminine role and may have a female gender identity – but there is little evidence to support this notion.

Studying gender differences

Content of gender roles

So, how do researchers set about studying gender differences? There are many different aspects (or dimensions) of gender typing. Table 2 lists some of the most common distinctions that can be made between the behavioural characteristics of the two sexes – these are referred to as the content of gender roles.

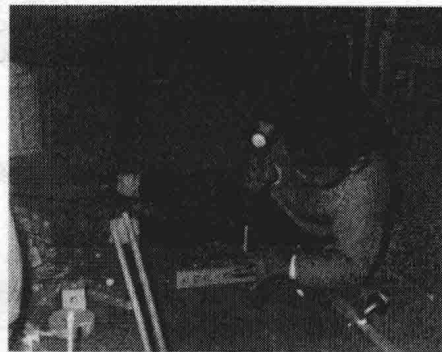
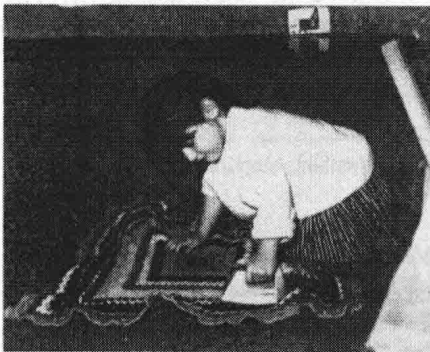
TABLE 2. Gender-typing content

Content area	Examples
Activities and interests	Toys, play activities, occupations, household roles and tasks
Personal and social attributes	Personality characteristics and social behaviour such as aggression, dominance, dependence, caring
Social relationships	Sex of friends; sexual partners
Stylistic and symbolic characteristics	Gestures, ways of sitting and walking, speech and language patterns

(After Huston, 1983)



Can you think of any other examples, and which category would you put them in?



An individual's identification with each of these content categories can be described in different ways, called constructs (see Table 3). These are *beliefs* about males and females – for example, that typically males are more assertive than females; that secretaries should be women and engineers should be men; *preferences* – for example, a desire to be assertive or to become an engineer; and *adoption* – behaving in an assertive way or becoming an engineer. In practice, preference and adoption often overlap because behaviour frequently reflects a preference, but this is not necessarily the case.

As an example, consider the following. If we are interested in gender-typing of children's activities (the first content area listed in Table 2), there are several ways in which we could investigate this. One obvious way would be to observe young children in a nursery school and note how much boys and girls played with gender-typed toys such as dolls and trucks (adoption), but we could also investigate young children's *beliefs* about which toys they thought were 'appropriate' for girls and boys, or which of a list of gender-typed toys they would most like to play with themselves (*preferences*).

TABLE 3. Gender-typing constructs

Construct	Examples
Beliefs	Stereotypes of males and females, e.g., believing that males are more assertive, females are more expressive.
Preferences, attitudes, values	Desire to possess gender-typed attributes and values associated with such characteristics, e.g., a desire to be assertive or expressive.
Behavioural enactment or adoption	Engaging in activities and occupations that are gender-typed; displaying gender-typed behaviour, e.g., behaving in an assertive or an expressive way.

(After Huston, 1983)

These two classification systems (Tables 2 and 3) are useful for organizing complex material and for discussing conflicting arguments and research findings. As we shall see, different findings concerning the nature and extent of gender differences may result from the fact that different constructs or content areas are being studied. By themselves, of course, they do not *explain* gender differences or gender typing.



List three examples each of gender-typed

- (a) toys
- (b) occupations
- (c) household roles and
- (d) social behaviour and personality characteristics.

Assessing the evidence

The study of gender differences in development has long been a popular topic and, consequently, there is a large and daunting research literature in this field. But there are ways of finding consistent patterns over a range of studies and these enable us to be more confident about some of the observed similarities and differences.

One way is the straightforward **literature review** in which we summarize the published findings of a large number of studies. The most comprehensive review of this kind was published in 1974 by Maccoby and Jacklin. They reviewed over 2,000 studies examining gender differences and tabulated the number of studies reporting statistically significant differences between males and females. Another such review is by Huston (1983).

An alternative approach is to use a technique called **meta-analysis**. Briefly, meta-analysis is a statistical procedure which combines the data of many independent studies and examines the patterns overall. Meta-analyses examining gender differences have been carried out in a number of areas. For example, Hyde (1984) carried out a meta-analysis of 143 studies examining gender differences in

aggression, and Lytton and Romney (1991) more recently completed a meta-analysis of 172 studies examining differences in parental socialization of girls and boys. Other areas in which meta-analyses have been carried out include helping behaviour, verbal ability and spatial ability. These two approaches (literature reviews and meta-analyses) complement each other.

Summary

- How gender roles develop is a key question for developmental theories and a focus in the nature/nurture debate.
- The term *sex* is used to refer to the biological categories of male and female, and *gender* to refer to the social categories of masculine and feminine.
- There are many different dimensions of gender-typing. These include activities and interests, personal and social attributes, social relationships, and stylistic and symbolic characteristics.
- An individual's identification with each of these can be described in several ways, including beliefs, preferences and adoption.
- A literature review and a meta-analysis are two ways of finding consistent patterns over a large number of studies.



A POSSIBLE PROJECT

Design a study to investigate children's gender-typed toys and play activities. (Table 3 might give you some ideas.)

You could extend this project by choosing another content area (see Table 2) for study. For example, you could investigate gender differences in children's social behaviour – such as aggression – or in children's social relationships – such as the sex of preferred friends.

2

Gender Differences in Infancy and Childhood

KEY AIMS: *By the end of this Part you should:*

- *be familiar with some of the evidence for gender differences in behaviour*
- *be aware of gender differences in cognitive (thinking) processes*
- *know how to evaluate the evidence for gender differences.*

How different are males and females?

In this Part we will examine the research evidence for gender differences from infancy onwards. Studies of infants (from birth to two years) are interesting because differences between males and females found early in life might reveal the influence of biological factors, although as we shall discuss later (Part 4) this is not necessarily so. We will look at two key areas: (a) social and play behaviour and (b) intellectual abilities. Later, we will discuss possible explanations for these differences.

Social and Play Behaviour

Activity level

In their monumental literature review, Maccoby and Jacklin found that there is a consistent tendency for boys to be physically more active than girls. For example, repeated observations of three- to four-year-old children in nursery schools have shown that, in general, boys engage in more vigorous, energetic play, such as running, throwing, kicking and hitting, and they use more space than girls. However, the evidence concerning younger infants is not clear: some, but not all, studies have found that male babies are more vigorous than female babies.



Toys and activities

From two years onwards, gender differences have been found in the toys which children select and in their play activities. For example, several observational studies of two- to four-year-old children in their homes, nursery schools and playgroups have found that boys played more frequently with toy vehicles, blocks, tools and balls, whereas girls engaged more often in painting and drawing, and played more with dolls and toy domestic items, such as cookers and irons (Huston, 1983). While there is some variation across studies, there is clear consistency in the findings summarized in Table 4. There are, of course, many toys and games which both girls and boys play with. Can you think of examples?

TABLE 4. Some gender differences in young children's preferred toys and activities

Girls tend to prefer:

Dolls
Domestic play (e.g., ironing,
cooking, shopping)
Dressing up

Boys tend to prefer:

Vehicles (e.g., cars, trains, trucks)
Building blocks
Tools

Boys and girls also differ in the themes they adopt when playing fantasy or pretend games. Girls more frequently adopt relationship roles, such as mummy and baby, in domestic episodes like cooking or shopping. Boys tend to engage in more fantasy and adventure roles such as monsters, spacemen, and television heroes.

Social behaviour

In their review of studies Maccoby and Jacklin concluded that, in general, there were few differences in the social behaviour of boys and girls that were found consistently. But there is one strikingly consistent difference: that is, from the pre-school years onwards, boys show more aggressive behaviour than girls. Although the direction of the gender difference in aggression is consistent across many studies, the magnitude of the difference between boys and girls is not large (Hyde, 1984). In addition, there is a greater difference between boys and girls in physical aggression (for example, hitting or kicking) than in verbal aggression (for example, nasty teasing).

Another difference between boys and girls found in many observational studies is in the frequency of rough-and-tumble play, such as play fighting, wrestling and chasing. Boys engage more frequently than girls in this type of play.

Regarding other areas of social behaviour the evidence is less clear. Some, but not all, studies have shown that girls tend to be more empathic, to be more compliant to others' requests or demands, to spend more time with teachers, and to seek more approval from them, than do boys. Table 5 summarizes these differences.



TABLE 5. Some gender differences in children's social behaviour

<i>Girls tend to:</i>	<i>Boys tend to:</i>
Be more empathic*	Show more aggressive behaviour
Be more compliant*	Engage in more rough-and-tumble play
Seek more approval*	

*found in some, but not all studies

Peer groups

The term *peer* refers to others of approximately the same age. From the pre-school years onwards, children tend to play with others of the same sex (see Table 6). Observations in playgroups and nursery schools have shown that during periods of free play (that is, when children select their own activities and are not organized by teachers) approximately two-thirds of playmates are of the same sex (Hartup, 1983). Sex-segregated play increases from the preschool to the middle school years (the ages of eight to twelve) (Maccoby, 1988).

By the middle school years sex-segregated play is very marked and there are distinct differences between boys and girls in activities and friendships. Boys more often play in larger groups, whereas girls more often play in smaller groups and pairs. Boys tend to play competitive team games and emphasize competition, dominance and leadership in their social relationships. Girls place more emphasis on intimacy and exclusiveness in their friendships. Further changes in friendships occur in adolescence (see the companion Unit by Nicholas Tucker on *Adolescence, Adulthood and Ageing*).

TABLE 6. Some gender differences in children's peer relationships

<i>Girls tend to:</i>	<i>Boys tend to:</i>
Play with girls	Play with boys
Play in small groups and pairs	Play in larger groups
Emphasize intimacy and exclusiveness	Engage in competitive team games
	Emphasize leadership and dominance



List at least five differences you might expect to see in the behaviour of girls and boys if you visited a nursery school.

Cross-cultural studies

But most of the studies cited were carried out in Western societies, mainly the UK and the USA. What happens in other societies? In a detailed cross-cultural study by Whiting and Edwards (1988) – the Six Cultures Study – children were observed in Kenya, India, Japan, the Philippines, Mexico and the USA. In the majority of these societies, too, girls were more caring, whereas boys were more aggressive, dominant, and engaged in more rough and tumble play – the same as in Western society.

Another difference between girls and boys was that boys spent more time away from the home, whereas girls were more frequently found in proximity to adults and infants. These differences were associated with the tasks the children were required to perform: for example, in traditional societies girls were more frequently assigned domestic and child-care chores, such as looking after younger brothers and sisters, whereas boys were given charge of animals, tasks which took them further away from the home.



What relevance do you think other cultures, for example, non-industrialized societies, have for understanding gender differences in our own culture?

Cognition: Do girls and boys think differently?

Are males more logical, preferring scientific, mathematical and mechanical problems, and are females more intuitive, preferring personal, social and verbal problems? Commonly-held stereotypes suggest that they are, and these stereotypes are reflected in current differences between the sexes in occupational choice, career expectations and interests. In this section we will examine briefly the evidence for gender differences in cognitive abilities. (Cognitive processes are covered in detail in the companion Unit by Peter Lloyd on *Cognitive and Language Development*.)

Verbal abilities

Maccoby and Jacklin (1974) concluded that, on average, girls perform better than boys on tasks involving verbal skills. Although this is generally accepted, the picture is quite complex. For example, the label 'verbal' is applied to a wide range of tasks involving different abilities such as reasoning, learning and memory.

There is some disagreement on when, during development, girls begin to display superior **verbal ability**. Maccoby and Jacklin put it from middle childhood (eight to twelve years) onwards, but there is evidence that it may be much earlier than this. For example, girls tend to talk earlier than boys and their speech is often more complex. There is also evidence that during middle childhood girls are better at reading than boys, but this is not found in all studies, and it could be related to children's perception of reading as a 'feminine' activity. However, biological factors may also be important; boys outnumber girls in the frequency of dyslexia and reading retardation.

Spatial abilities

Whereas girls tend to perform better on tasks involving verbal skills, boys tend to do better on tasks involving **spatial skills** (Maccoby and Jacklin, 1974; Linn and Petersen, 1985), which usually involve visualizing a spatial arrangement and performing mental operations on it. An example of a spatial rotation test – recognizing upside-down or rotated objects – is shown in Figure 1. Others would include navigation, orientation, map-reading, solving mazes and doing jigsaw puzzles. Like verbal tasks, spatial tasks are quite complex and require several different cognitive abilities.

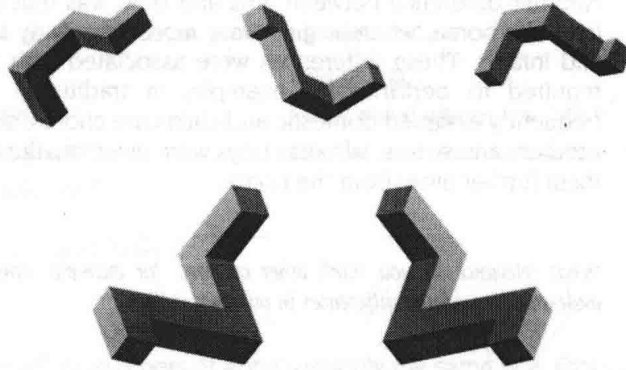


FIGURE 1. Spatial rotation skills. In this test the person must imagine which photograph of the three-dimensional object matches one of two mirror images of the same object. (From *Scientific American*, Sept 1992. Copyright © by *Scientific American*. All rights reserved.)

In a similar task (called perceptual disembedding) the person must find a simple geometric shape within a complex design. Two examples are shown in Figure 2. Some people concentrate on the whole picture and are uninfluenced by the surrounding context (**field-independent**). Others focus on the details of a figure and are more affected by the surrounding context (**field-dependent**). On average, boys are found to be more field-independent than girls. Gender differences in spatial ability tend to increase up to early adulthood.

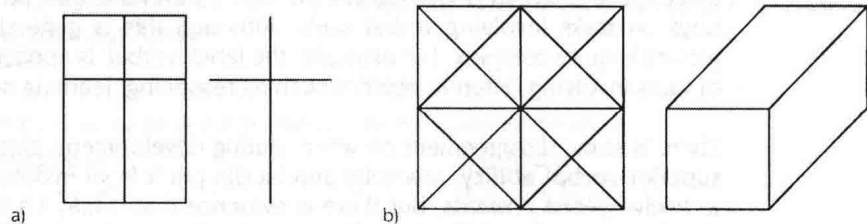


FIGURE 2. Examples of Embedded Figures. For each item (a) and (b) the participant is asked to locate the simple figure on the right-hand side in the more complex design on the left-hand side. (Adapted from Witkin *et al.*, 1962)

Mathematical abilities

From around puberty (ages 11–14) onwards boys generally perform better than girls in tests of mathematical reasoning, though there are many exceptions. This difference appears to be particularly pronounced for those children who are intellectually very advanced for their age. For example, in a series of surveys carried out by Benbow and colleagues in the USA to find children (aged twelve to sixteen) of exceptional mathematical ability, boys outnumbered girls by 13 to 1. More boys than girls pursue mathematics and science subjects in the later years of school and in higher education.

However, these patterns are not necessarily due to mathematical potential in males and females. They are also influenced by social factors. Gender differences

in mathematical achievement vary considerably across cultures, and may be related to opportunities and encouragement to learn mathematics. (We will return to this issue in Part 4.) Motivation is also an important factor: males appear to value mathematics more highly, and mathematics and sciences are, traditionally at least, viewed as male domains. In addition, although up until adolescence girls and boys perform equally well in mathematics, girls rate themselves lower than boys, suggesting that gender-role stereotypes have an effect on girls' expectations for success; and a commonly-held view at this age is that boys do not like girls who are clever at science.

SAQ

3

In which cognitive abilities do girls outperform boys and in which areas do boys outperform girls?

?

Do you think any cognitive differences between males and females are primarily attributable to biological factors or do you think social factors are more important? Can you think of examples to support your view? Can you think of arguments against your view? (Figure 3 may give you some ideas.)

Figure 3 illustrates some of the factors involved and the connections between them. The central question is 'why do so few girls become engineers?' As you can see there may be many reasons, including small mean differences in certain skills, differential encouragement by teachers, the role of sex stereotypes, and gender roles and beliefs about the abilities of boys and girls.



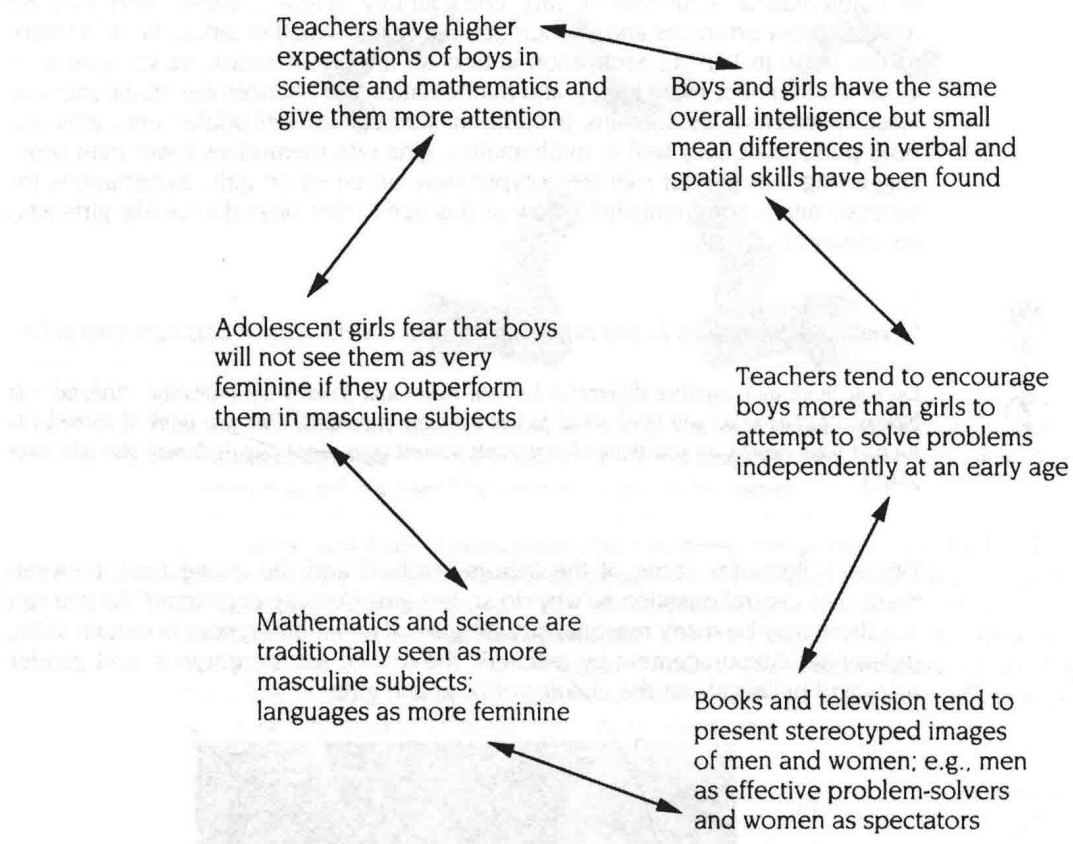


FIGURE 3. Why do so few girls become engineers? (After Campbell, 1989)

Summary

- Research on young infants does not reveal many consistent differences between boys and girls – in infancy, similarities outweigh the differences.
- From the preschool years onwards there are some fairly consistent differences in children’s social and play behaviour, for example in girls’ and boys’ preferred toys, activities and playmates.
- These differences are most clearly documented for children in Western countries, but some of the differences – for example, in rough-and-tumble play and aggression – are also found in non-Western cultures.
- Consistent differences between girls and boys are also found on tests of certain cognitive abilities. Girls tend to perform better on verbal tasks, whereas boys tend to perform better on tests of spatial skills and mathematical reasoning.
- The documenting of gender differences does not, of course, imply that these differences are inevitable. In Parts 4–6 we will look at possible explanations.

Interpreting the evidence

What do these findings mean? How do we interpret them? For example, what does it mean to say that boys are more aggressive than girls or that girls perform better on verbal tests, whereas boys perform better on spatial tests? Does it mean, for example, that *all* boys are more aggressive than *all* girls, and in *all* circumstances? Obviously not. In assessing the research evidence we need to consider several factors, including both methodological issues and problems of interpretation. Here we will look at some of the more important ones.

Mean differences

The gender differences described refer to *mean* (or average) differences between groups of girls and groups of boys. There is always great variation among *individuals* of each sex (this is referred to as **within-sex variability**) and considerable *overlap* between the sexes. For example, on average, boys show more aggressive behaviour than girls, but many boys are in the same range as girls, and some girls are more aggressive than many boys.

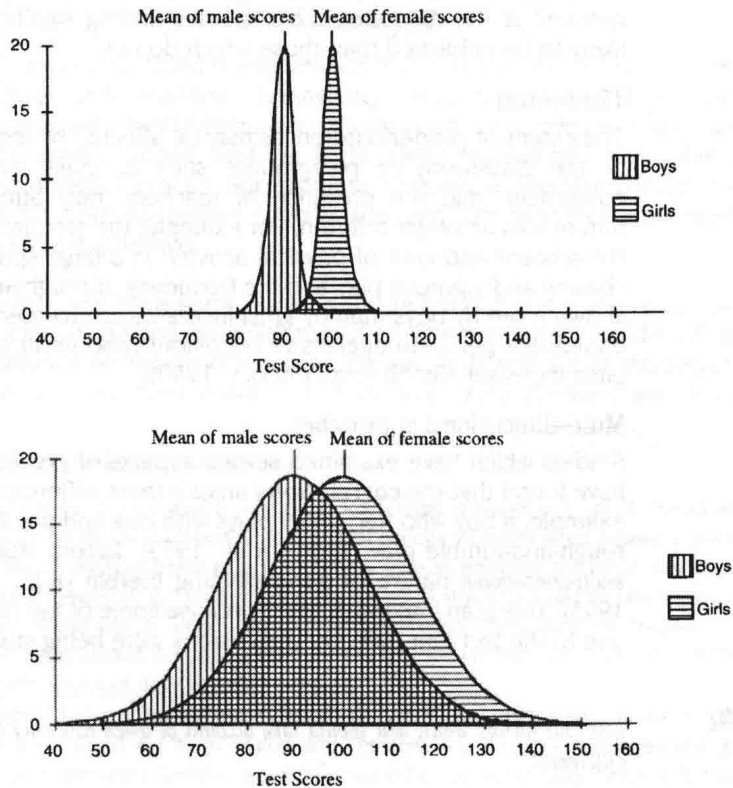


FIGURE 4. Scores for girls and boys on a hypothetical cognitive test. In both graphs the *mean* scores for girls and boys are the same – 100 for girls and 90 for boys – but the *distribution* of scores is different. There is much greater *overlap* (shown by cross-hatching) between scores for girls and scores for boys in the second graph than in the first.