Piaget's self-discovery. Fourth, the construction phase resembles in some ways the peer tutoring approach based on Vygotsky's ideas.

How successful has the CASE program been? In general, the findings have been very impressive (Shayer, 1999). Students from numerous schools who have taken part in the CASE program have performed much better than other students on the nationwide General Certificate of Secondary Education (GCSE) examinations taken by 16-year-olds in the UK. This is true for students of very varying levels of ability. It is also true across science, mathematics, and English. For example, consider the 1997 GCSE results. On the basis of past performance, the percentages of CASE students predicted to obtain C grades or better were as follows: 19% in science, 18% in mathematics, and 26% in English. The actual percentages were 48% (science), 44% (mathematics), and 49% (English).

Evaluation

- (+) The CASE program represents an important combination of some of the main ideas of Piaget and Vygotsky to provide an approach taking full account of external (teacher-related) and internal (child-related) factors.
- (+) The CASE program has proved successful across a wide range of ability and has led to substantial increases in academic performance. It has even led to increases in general intelligence (Shayer, 1999). Its success has led to the development of other programs such as Cognitive Acceleration through Mathematics (CAME) and Cognitive Acceleration through Technology Education (CATE).
- (−) The CASE program incorporates five main features, and it is hard to assess the relative contributions of each feature to its overall success.
- (−) The complexity of the CASE program means that teachers require fairly lengthy and detailed training to use it successfully.

Chapter Summary

Piaget's theory

- According to Piaget, children proceed in turn through the sensori-motor, pre-operational, concrete operations, and formal operations stages.
- Two of the main achievements of the sensori-motor stage are object permanence and deferred imitation.
- Pre-operational children fail to exhibit conservation because they focus on only one aspect of a situation at a time and they lack the cognitive operation of reversibility. Their thinking is characterized by egocentrism.
- Children in the concrete operations stage show an increasing independence of thought from perception. They acquire various cognitive operations of a logical or mathematical nature, and show evidence of conservation and transitivity.
- Children in the formal operations stage can think in abstract terms and can contemplate hypothetical states of affairs.
- Piaget underestimated the cognitive abilities of young children but overestimated those of adolescents and adults. His approach is descriptive rather than explanatory.

Vygotsky's theory

- According to Vygotsky, the child is like an apprentice who learns directly from social interaction with those who are more knowledgeable.
- Vygotsky argued that children have a zone of proximal development extending beyond their current level of achievement.
- According to Vygotsky, language and thought are independent of each other in young children but language (e.g., inner speech) becomes increasingly central to cognitive development over the years.

- Studies on scaffolding show the importance of the zone of proximal development.
- It has been found that inner speech is of value in effective thinking in children.
- Vygotsky exaggerated the importance of the child's social environment in cognitive development.

Contemporary approaches

- Advances in cognitive development can be studied effectively by the microgenetic method in which intensive training is provided over a relatively short period of time.
- According to Siegler's overlapping waves theory, children typically exhibit considerable variability in the strategies they use to tackle any given type of problem.
- Using several different strategies facilitates the construction of new strategies based on combining elements of existing strategies.
- The rapid strategy changes produced by use of the microgenetic method closely resemble those occurring in a natural environment.
- Overlapping waves theory is mainly applicable to tasks on which most children use well-defined strategies.

Educational implications

- According to Piaget, children learn best from self-discovery that can be fostered by creating disequilibrium. It is also important for children to acquire a range of schemas or cognitive structures.
- Many of the cognitive structures emphasized by Piaget are based on mathematical or logical principles and are of little relevance to several school subjects.
- Vygotsky's emphasis on the child as an apprentice led to the development of scaffolding (e.g., peer tutoring). Scaffolding has proved effective, but its success depends very much on the relationship between tutor and child.
- The CASE program combines some of Piaget's and Vygotsky's best ideas to provide a very successful approach to teaching consisting of five main features. The complexity of the CASE program makes it difficult to identify the relative contribution of each of its features to its success.

Further Reading

- Feldman, D.H. (2004). Piaget's stages: The unfinished symphony of cognitive development. *New Ideas in Psychology*, *22*, 175–231. Feldman updates Piaget's views in light of our current understanding of cognitive development.
- Granott, N. (2005). Scaffolding dynamically toward change: Previous and new perspectives. *New Ideas in Psychology*, *23*, 140–151. Nira Granott provides a thorough analysis of scaffolding and discusses its relevance to Vygotsky's theories.
- Harris, M., & Butterworth, G. (2002). *Developmental psychology: A student's handbook*. Hove, UK: Psychology Press. This book provides good coverage of Piaget's and Vygotsky's theoretical approaches to cognitive development.
- Shayer, M. (1999). Cognitive acceleration through science education II: Its effects and scope. *International Journal of Science Education*, *21*, 883–902. The nature of the CASE program and its effects on academic achievement are discussed in this article by a central figure in that program.
- Shayer, M. (2003). Not just Piaget; not just Vygotsky, and certainly not Vygotsky as *alternative* to Piaget. *Learning and Instruction*, *13*, 465–485. This article contains an interesting comparison of the views of Piaget and Vygotsky.
- Siegler, R.S. (2005). Children's learning. *American Psychologist*, *60*, 769–778. Siegler gives a useful overview of his theory and of the research relevant to it.
- Smith, P.K., Cowie, H., & Blades, M. (2003). *Understanding children's development* (4th ed.). *Oxford*, UK: Blackwell. Chapters 12, 13, and 15 provide detailed introductory coverage of the main theories of cognitive development.

Chapter 15

Contents

15

Social development in everyday life

As children grow up, they have a large increase in their social involvement with other children, and a clearer sense of their place in society. Several kinds of learning underlie children's development of social behavior. For example, they acquire knowledge about themselves and about society's expectations concerning the appropriate behavior of boys and girls. The first part of the chapter deals with the issue of gender development. The second part is concerned with how children learn to control their own behavior so they can function successfully in social situations. For example, children learn to engage in prosocial or helping behavior, and they also discover that antisocial or aggressive behavior is generally counterproductive. Finally, there is moral development. If children are to fit into society, they have to learn to distinguish between right and wrong.

GENDER DEVELOPMENT

When a baby is born, everyone immediately asks, "Is it a boy or a girl?" As the baby develops, its treatment by its parents and other people is much influenced by its sex. In addition, the growing child's thoughts about itself and its place in the world increasingly depend on whether it is male or female. Most children by the age of 2 identify themselves and others accurately as male or female, and infants of 9–12 months respond differently to photographs of male and female strangers (Brooks-Gunn & Lewis, 1981). From the age of 3 or 4, children have fixed stereotypes about the activities (e.g., mowing the lawn; housekeeping) and jobs (e.g., doctor; nurse) appropriate for males and females. These are known as **sex-role stereotypes**.

The literature on sex-role developments contains a bewildering variety of terms. In general, "sex" refers to biological and anatomical differences, whereas "gender" refers to socially determined aspects of thinking and behavior. In practice, however, this sharp distinction is often blurred. Other terms in common use are gender identity and sex-role behavior. **Gender identity** refers to a child's or adult's awareness of being male or female. **Sex-typed behavior** is behavior consistent with the prevailing sex-role stereotypes.

Egan and Perry (2001) pointed out that there is more to gender identity than simply being aware one is male or female. It also involves feeling one is a typical member of one's sex, feeling content with one's own biologically determined sex, and experiencing pressure from parents and peers to conform to sex-role stereotypes. Egan and Perry assessed these various aspects of gender identity in boys and girls between the ages of 10 and 14. Boys on average had much higher scores than girls on feeling oneself to be typical of one's sex, on feeling content with one's biological sex, and on experiencing pressure from others to conform with sex-role stereotypes. Thus, it is regarded as more important by individual children and by society at large (at least in Western cultures) for boys to conform to stereotypical views of male behavior than for girls to conform to stereotypical views of female behavior.

Key Terms

Sex-role stereotypes: culturally determined beliefs about appropriate male and female behavior.

Gender identity: a boy's or a girl's awareness of being male or female, respectively.

Sex-typed behavior: behavior consistent with **sex-role stereotypes**.

Studying and gender

A UK government survey has found that in 2005 boys were falling further behind girls in terms of exam achievement. For example, in English schools, at Key Stage 2 level 4+ was achieved by 67% of boys and 71% of girls. By Key Stage 3 the gap widened and level 5+ was reached by 58% of boys and 64% of girls. High school GCSE exam results showed an even wider gap, with 52.2% of boys and 62.1% of girls gaining five or more GCSEs at grades A*–C. The gap varies depending on the subject, but was greatest for English with a 16% difference between boys and girls reaching grade C or above.

A specific example is Merseyside in North West England, where at GCSE in 2007 8% more girls than boys achieved five or more grades A*–C.

http://findoutmore.dfes.gov.uk/2006/07/gender_and_achi.html

OBSERVED SEX DIFFERENCES

Some ideas about sex-typed behavior are (thankfully!) in steep decline. Few people accept that men should go out to work and have little to do with looking after the home and the children, whereas women should stay at home and look after the children. However, many stereotypes still exist, and it is important to consider the actual behavior of boys and girls.

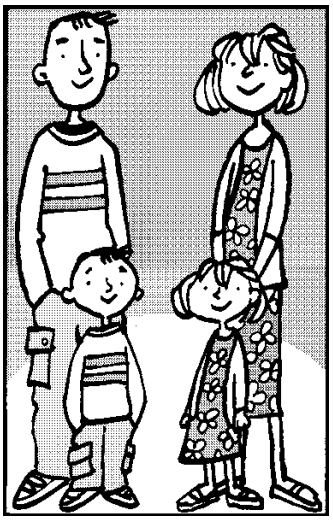
Most observed sex differences in behavior are fairly small. However, Golombok and Hines (2002) identified a few sex differences present in the first 2 years of life. Girl infants stay closer to adults than do boy infants, but boys are more upset by situations outside their control than are girls. In addition, girls on average learn to talk at an earlier age than boys. Shaffer (1993) pointed out that girls show more emotional sensitivity than boys. For example, girls from the age of 5 are more interested than boys in babies, and respond more attentively to them. Girls also have less developmental vulnerability than boys, with more boys showing mental retardation, language disorders, and hyperactivity.

In the United Kingdom, girls are outperforming boys in nearly all school subjects. Consider, for example, performance in the 2005 GCSE examinations (typically taken by UK students at the age of 16). The top grade of A* was achieved by girls on 13.1% of their courses compared to only 7.1% by boys. The comparable figures for the next grade (A) were 21.2% (girls) and 15.5% (boys). The precise reasons for this difference are unknown. However, more boys than girls regard studying as "uncool."

Berk (2006) provided a list of gender differences in mental abilities and personality including some of the differences discussed already. Boys have slightly better spatial and mathematical abilities, they have a higher activity level, and they experience more developmental problems. Girls have slightly higher verbal abilities and school achievement. They also exhibit more emotional sensitivity (e.g., kindness; considerateness), more fear and anxiety, tend to be more compliant, and suffer more from depression. Note, however, that nearly all these gender differences are small.

Else-Quest et al. (2006) carried out a meta-analysis to assess gender differences in children's temperament. Girls scored higher than boys on the factor of effortful control, especially its dimensions of perceptual sensitivity and inhibitory control. Boys scored higher than girls on surgency (similar to extraversion), especially its dimensions of activity and high-intensity pleasure.

There are fewer (and smaller) differences between the sexes than is generally assumed. Why is there this gap between appearance and reality? One reason is that we sometimes misinterpret the evidence of our senses to fit our stereotypes. Condry and Condry (1976) asked college students to watch a videotape of an infant. How the infant's behavior was interpreted depended on whether it was called David or Dana. The infant was perceived as being "angry" in its reaction to a jack-in-the-box if it had been called David but "anxious" if it had been called Dana. Stern and Karraker (1989) reviewed 23 studies resembling the one by Condry and Condry. Overall, knowledge of an infant's gender reliably influenced young children's behavior, but adults' behavior was much less consistently affected by such knowledge.



SOCIAL LEARNING THEORY

According to social learning theory (Bandura, 1977; see Chapter 7), gender development occurs as a result of the child's experiences. Children learn to behave in ways that are rewarded and to avoid behaving in ways that are punished. Since society has expectations about the ways in which boys and girls should behave, the operation of socially delivered rewards and punishments produces sex-typed behavior. For example, parents encourage girls rather than boys to play with dolls, with the opposite being the case when it comes to playing with guns.

Bandura (1977) also argued that children learn sex-typed behavior by observing the actions of various models of the same sex (e.g., parents; other children; teachers). This is observational learning (discussed more fully in Chapter 7), and it leads children to copy or imitate others' behavior. Much observational learning occurs when children watch television or films. Signorielli (2001) found fewer gender stereotypes on television over the years. For example, female characters are now more likely to have careers than was the case 20 years ago. However, women on television are still typically portrayed as emotional and caring, whereas men are dominant and powerful. Children are also exposed to gender stereotypes in other ways. For example, gender stereotypes are very strong in most video games (Calvert et al., 2003).

Fathers may play a major role in the development of sex-typed behavior in their sons.

Bussey and Bandura (1999) expanded social learning theory in their social cognitive theory. They identified three forms of learning promoting gender development:

1. Observational learning or modeling, in which the child chooses to imitate those aspects of others' behavior that he/she believes will increase feelings of mastery.
2. Direct tuition, in which other people teach the child about gender identity and sex-typed behavior.
3. Enactive experience, in which the child learns about sex-typed behavior by discovering the outcomes (positive or negative) resulting from their actions.

Findings

Observational learning was studied by Perry and Bussey (1979). Children of 8 or 9 watched male and female adult models choose between sex-neutral activities (e.g., selecting an apple or a pear). Afterwards, the children generally made the same choices as the same-sex model. This finding suggests that observational learning may play an important role in gender development. However, Barkley et al. (1977) reviewed the literature, and found children showed a bias in favor of the same-sex model in only 18 out of 81 studies.

Many studies have considered the effects of direct tuition on gender development. Fagot and Leinbach (1989) found that parents encouraged sex-typed behavior and discouraged sex-inappropriate behavior in their children before the age of 2. For example, girls were rewarded for playing with dolls and discouraged from climbing trees. Those parents making most use of direct tuition had children who behaved in the most sex-typed way. However, Golombok and Hines (2002) found in a review that there is only a modest tendency for parents to encourage sex-appropriate activities and discourage sex-inappropriate ones. This tendency may occur because parents want to encourage certain forms of behavior and discourage others. However, another possibility is that parents are responding to different pre-existing preferences in boys and girls. The review found that boys and girls receive equal parental warmth, encouragement of achievement, discipline, and amount of interaction.

Parents may try to discourage what they see as sex-inappropriate behavior. This little girl is helped out of the tree, while her brother is permitted to continue climbing.

Evaluation

- The social learning approach emphasizes the social context in which the development of gender takes place.
- As social learning theorists claim, some sex-typed behavior occurs because it has been rewarded. In addition, sex-inappropriate behavior is avoided because it is discouraged or punished.
- Observational learning probably plays a part in the development of sex-role behavior.

- Social learning theorists assume that learning processes are very similar at all ages. However, this assumption is wrong. For example, consider young children and adolescents watching a film in which a man and a woman are eating a meal together. Young children's observational learning might involve focusing on the eating behavior of the same-sexed person, whereas adolescents might focus on his/her social behavior.
- Social learning theorists focus mainly on children's learning of *specific* forms of behavior. However, children also engage in *general* learning (e.g., acquiring organized beliefs about differences between the sexes).

GENDER SCHEMA THEORY

Martin and Halverson (e.g., 1987) put forward a cognitive approach to gender development known as gender schema theory. According to this theory, children as young as 2 or 3 who have acquired basic gender identity form **gender schemas**. These schemas consist of organized beliefs about each gender, and they influence what children attend to. These schemas also play a part in how children interpret the world. According to Shaffer (1993, p. 513), "Gender schemas 'structure' experience by providing an organization for processing social information."

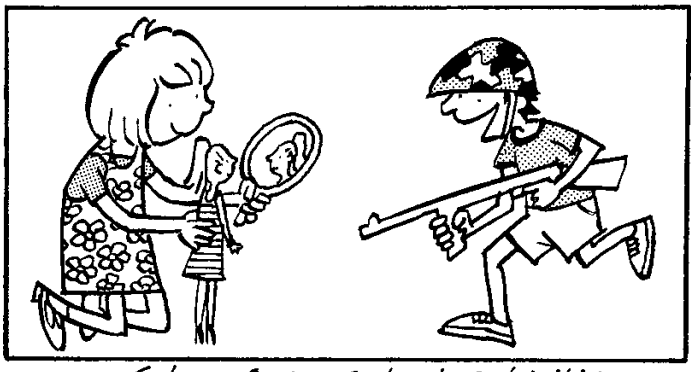
The first schema formed is an ingroup/outgroup schema. It consists of organized information about which toys and activities are suitable for boys and which are suitable for girls. Another early schema is an own-sex schema. This contains information about how to behave in gender-typed ways (e.g., how to dress dolls for a girl).

Martin, Wood, and Little (1990) argued that the development of gender schemas goes through three stages:

1. Children learn specific things associated with each gender (e.g., boys play with guns; girls play with dolls).
2. Children from about the age of 4 or 5 start to link together the different kinds of information they possess about their own gender (e.g., children who like to play with dolls also wear dresses) to form more complex gender schemas. This is only done with respect to their own gender.
3. Children from the age of 8 form complex gender schemas of the opposite sex as well as their own.

Key Term

Gender schemas: organized beliefs about suitable activities and behavior for each gender.



Findings

According to the theory, gender schemas are used by children to organize and make sense of their experiences. If they are exposed to information not fitting one of their schemas (e.g., a boy combing the hair of a doll), then the information should often be distorted to fit the schema. Martin and Halverson (1983) tested this prediction. They showed 5- and 6-year-old children pictures of schema-consistent activities (e.g., a girl playing with a doll) and of schema-inconsistent activities (e.g., a girl playing with a toy gun). Schema-inconsistent activities were often misremembered 1 week later as schema-consistent (e.g., a boy playing with a toy gun).

Bradbard et al. (1986) presented boys and girls between the ages of 4 and 9 with gender-neutral objects such as burglar alarms and pizza cutters. Some objects were described as "boy" objects whereas others were described as "girl" objects. There were two key findings. First, children spent much more time playing with objects they

had been told were appropriate to their gender. Second, even a week later the children remembered whether any given object was a "boy" or a "girl" object. Martin, Eisenbud, and Rose (1995) also found that children prefer toys that are labeled for their own gender. In addition, the children predicted that same-sex peers would also prefer the same toys. Finally, initially very attractive toys were the ones most likely to lose their appeal when labeled as appropriate for the other gender.

Martin et al. (1990) provided evidence that children's gender schemas develop through the three stages they identified (discussed earlier). They described someone of unspecified sex who had a given sex-linked characteristic (e.g., worked as a nurse), and asked the children to predict other characteristics that person was likely to possess. Younger children found this task difficult because they hadn't reached stage 2 in the development of gender schemas. Older children performed better when the gender-linked characteristic was appropriate to their own gender because they were more likely to have reached stage 3.

According to the theory, gender schemas influence children's behavior. Thus, the amount of sex-typed behavior displayed by a child at a given time should depend on the gender-related knowledge he/she has acquired previously. This prediction was tested by Campbell, Shirley, and Candy (2004) in a longitudinal study in which children were tested at 24 and 36 months. Knowledge and gender schemas and sex-typed behavior both increased over the 12-month period, but there was no evidence that the extent of sex-typed behavior depended on the amount of previously acquired gender-related knowledge. These findings mean that it is unclear whether gender knowledge *causes* subsequent sex-typed behavior.

Evaluation

- (+) Gender schemas exist and influence children's behavior.
- (+) The assumption that children are actively involved in making sense of the world in light of their schema-based knowledge is plausible.
- (−) The theory de-emphasizes the role of social factors in gender development.
- (−) The association between possession of a gender schema and behavior is not very strong. As Bussey and Bandura (1999, p. 679) pointed out, "Children do not categorize themselves as 'I am a girl' or 'I am a boy' and act in accordance with that schema across situations and activity domains." Campbell et al.'s (2004) findings cast some doubt on the notion that gender schemas causally influence subsequent sex-typed behavior.
- (−) The theory doesn't really explain *why* gender schemas develop and take the form they do.

PROSOCIAL BEHAVIOR

Some children and adults are very helpful and cooperative, whereas others are aggressive and unpleasant. The terms "prosocial behavior" and "antisocial behavior" are used to describe these very different ways of treating people. Prosocial behavior can be defined as "any voluntary, intentional action that produces a positive or beneficial outcome for the recipient regardless of whether that action is costly to the donor, neutral in its impact, or beneficial" (Grusec, Davidov, & Lundell, 2002, p. 2). Prosocial behavior is more general than altruism, which is voluntary helping behavior that benefits someone else but provides no obvious self-gain to the person who behaves altruistically. It is often assumed that altruism depends on empathy, which is the ability to share the emotions of another person in order to understand his/her needs. In contrast, antisocial behavior (discussed in the next section) is behavior that harms or injures someone else. There is a full discussion of prosocial behavior in adults in Chapter 18.

Even quite small children can show concern when they see others are unhappy.

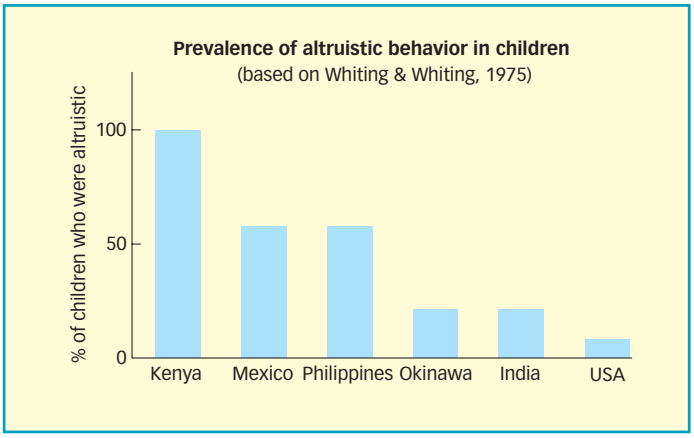
How common is prosocial behavior in children? Eisenberg-Berg and Hand (1979) studied 4- and 5-year-olds in preschool classes, recording evidence of prosocial behavior (e.g., sharing; comforting). On average, each child exhibited such behavior five or six times per hour.

GENDER DIFFERENCES

It is assumed in most Western cultures that girls are more empathic and show more prosocial behavior than boys. There is some support for that assumption. Olweus and Endresen (1998) asked adolescent boys and girls to read a description of a distressed fellow student. Older adolescent girls showed greater empathic concern than younger adolescent girls regardless of whether the distressed student was male or female. Boys showed the same developmental pattern as girls when the description referred to a girl. However, older adolescent boys showed *less* empathic concern for a distressed boy than did younger adolescent boys. This is presumably because being concerned about another boy was perceived as being in conflict with their masculine identity.

Grusec et al. (2002) reviewed the evidence on gender differences in prosocial behavior. Girls typically show more prosocial behavior than boys. However, gender differences in prosocial behavior are generally smaller when such behavior is assessed by direct observation than when assessed by self-report measures. In addition, gender differences in prosocial behavior are smaller when the behavior involves sharing or helping than when it involves showing consideration or kindness.

We would expect children to exhibit more prosocial behavior in collectivistic cultures in which the emphasis is on group wellbeing than in Western individualistic cultures in which the emphasis is on individuals' own welfare (see Chapter 1). Evidence consistent with that expectation was reported by Whiting and Whiting (1975). They studied the behavior of young children between the ages of 3 and 10 in six cultures (United States, India, Okinawa – an island in South West Japan, Philippines, Mexico, and Kenya). There were substantial differences in altruistic behavior across these cultures (see figure below). The least altruistic behavior was shown in the United States, which is a very individualistic culture.



Findings such as those of Whiting and Whiting (1975) have led many experts to conclude that members of non-industrialized and collectivistic cultures are more altruistic than those of industrialized and individualistic cultures. However, this may well not be altogether correct. Fijneman, Willemsen, and Poortinga (1996) found that people living in collectivistic cultures expect more help from others than do those living in individualistic cultures. Thus, their motives in helping may be based on what they expect in return rather than on being altruistic. Collectivistic and individualistic cultures are similar in that individuals expect to give only a little more help than they receive in return. Thus, there is a norm of reciprocity or mutual exchange in both types of cultures, and they may differ little in their level of altruism.

EMPATHY

According to Hoffman (1987), there are four main stages in the development of empathy:

- *Stage 1: Global empathy.* This stage starts during the first year of life, before the infant can distinguish between self and other. The infant will sometimes start crying when another infant cries, but this is an involuntary reaction rather than genuine empathy.
- *Stage 2: "Egocentric" empathy*. This stage starts in the second year of life. The developing sense of self allows the child to realize it is someone else rather than the

child itself who is in distress. However, the child still can't distinguish clearly between someone else's emotional state and its own.

- *Stage 3: Empathy for another's feelings.* This stage starts at about 2 or 3. It involves genuine empathy based on a clear awareness of (and empathy for) the various emotions others experience.
- *Stage 4: Empathy for another's life condition.* This stage starts in late childhood. Children in this stage are aware that other people have separate identities and life experiences. This permits them to understand how others are likely to be feeling even when it is not clear from their behavior.

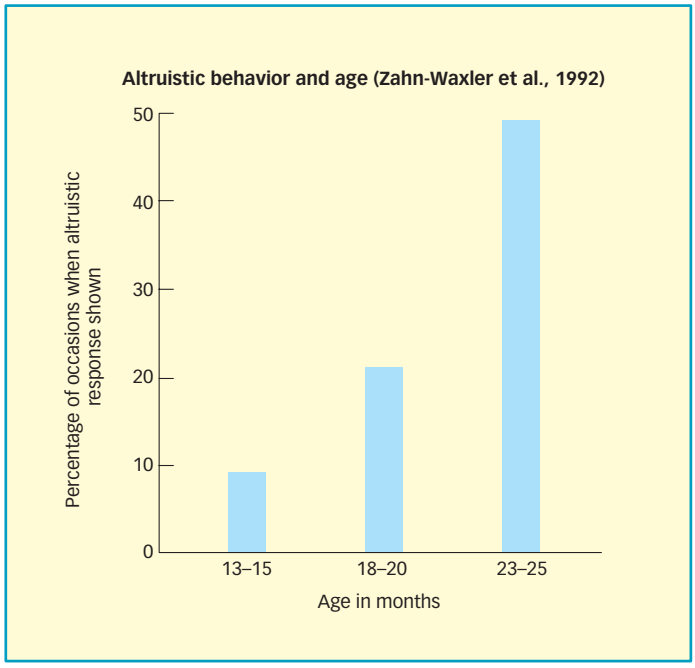
Findings

Zahn-Waxler, Robinson, and Emde (1992) obtained evidence of empathic concern in children of between 13 and 20 months on 10% of occasions on which someone else's distress wasn't caused by the child. This empathic concern took several forms including sad or upset facial expressions and expressing concern (e.g., "I'm sorry"). The level of empathic concern more than doubled among children aged between 23 and 25 months.

Zahn-Waxler et al. (1992) also obtained evidence about altruistic behavior in response to another person's distress. The kinds of altruistic behavior shown by the children included sharing food, hugging, and giving a bottle to a crying baby. There was a marked increase with age in altruistic behavior in response to distress not caused by the children (see the figure on the right).

Empathy generally increases over the early school years. One reason for this is because children begin to understand an increasingly wide range of emotions. In addition, they use more cues when working out what others are feeling (Ricard & Kamberkkilicci, 1995).

There are substantial differences in prosocial behavior among children of any given age. Why is this? Part of the answer seems to involve genetic factors. Zahn-Waxler et al. (1992) carried out a study on identical and fraternal twins aged between 14 and 20 months. Their mothers *reported* on various types of prosocial behavior (e.g., attempts to help). There was more similarity in the amount of prosocial behavior shown by identical than by fraternal twins, suggesting that genetic factors are important. However, Zahn-Waxler et al. obtained different findings when *observing* the twins' reactions to simulated distress. There was no clear evidence that the prosocial behavior of the identical twins was more similar than that of the fraternal twins. In subsequent research, Zahn-Waxler et al. (2001) found in a twin study that individual differences in empathy depended moderately on genetic factors.



Evaluation

- (+) As predicted by the theory, there is evidence of genuine empathy at a surprisingly early age.
- (+) There is general (but not detailed) support for the four stages of empathy development proposed by Hoffman (1987).
- (−) The role of genetic factors in determining individual differences in empathy may be de-emphasized in the theory.
- (−) The theory says little about how parental behavior influences the development of empathy (see later).

PARENTAL INFLUENCE

Parental behavior is a major determinant of how much prosocial behavior their children will display. Schaffer (1996) argued that *five* types of parental behavior are of particular value in teaching children to be altruistic:

1. *Provisions of clear and explicit guidelines* (e.g., "You mustn't hit other people, because you will hurt and upset them").
2. *Emotional conviction*. Guidelines to children should be given in a fairly emotional way.
3. *Attributing altruistic or prosocial characteristics to the child* (e.g., "You are a really helpful girl").
4. *Parental modeling*. The parent should behave altruistically.
5. *Empathic and warm parenting*.

If the mother of an aggressive child emphasizes how much the other child is being hurt, the aggressive child is more likely to feel empathy and stop the undesirable behavior.

Findings

There is support for the factors identified by Schaffer (1996) as promoting altruistic behavior. So far as factor 1 (clear and explicit guidelines) is concerned, Krevans and Gibbs (1996) found that children were more likely to show empathy for other people and to exhibit prosocial behavior when their mothers repeatedly asked them to consider the likely effects of their behavior on others.

Evidence that children are more likely to show altruistic behavior if their parents have emotional conviction (factor 2) was reported by Zahn-Waxler, Radke-Yarrow, and King (1979). They observed the reactions of children between the ages of 18 and 30 months towards the victims of distress. The average percentage of occasions on which children showed altruistic behavior was twice as high (42% vs. 21%) when the mother made extensive use of emotional explanations than when she did not.

What about factor 3 (attributing prosocial characteristics to the child)? It is also important that children learn to associate their prosocial behavior to internal factors (e.g., "I'm a helpful person") rather than external ones (e.g., "I'm being helpful in order to be praised"). Fabes et al. (1989) found that external rewards aren't an effective way of producing prosocial behavior. They promised toys to some children if they sorted colored paper squares for children who were sick in hospital. Other children weren't offered any reward for carrying out the same task. After a while, all the children were told they could continue to sort the colored squares, but they wouldn't receive any reward for doing so. The children who had been rewarded were less likely to continue to be helpful than those who had not been rewarded.

Evidence relevant to factor 4 (parental modeling) was reported by Grusec, Saas-Kortsaak, and Simutis (1978). Children aged between 8 and 10 played a game to win marbles, some or all of which could be donated to help poor children. The participants observed an adult playing the game before them. The adult either gave away half or none of her marbles, and she either exhorted or didn't exhort the children to give away half of their marbles. Most children who saw the adult give marbles did so themselves, whereas exhortations to give marbles had only a small effect. Thus, the children were more influenced by the model's behavior than by her exhortations. However, only a few children donated any marbles when they played the marble game again 3 weeks later.

Burleson and Kunkel (2002) studied the emotional support skills of children aged 6 and 8. They found that the mothers' comforting skills predicted their children's emotional support skills. The comforting skills of the children's peers also predicted their emotional support skills.

We turn now to factor 5 (empathic and warm parenting). Zahn-Waxler et al. (1979) and Robinson, Zahn-Waxler, and Emde (1994) found that children having a

warm and loving relationship with their parents are the ones most likely to show high levels of prosocial behavior. Waters, Wippman, and Sroufe (1979) found that children who had formed secure attachments in infancy showed more empathy later in childhood.

It can reasonably be argued that many studies on altruism or prosocial behavior are rather artificial. Zarbatany, Hartmann, and Gelfand (1985) argued that it is important to distinguish between "true" altruism and conformity to adult expectations. They found that older children seemed more generous than younger ones, but this was mainly because older children were more responsive to adult expectations. The finding by Grusec et al. (1978) that there were no long-term effects of observational learning on prosocial behavior is what might be expected if the children were simply conforming to what they perceived to be the model's expectations.

MEDIA INFLUENCES

Can prosocial behavior be increased by watching suitable television programs? Evidence that it can has been reported in several studies discussed shortly. If prosocial television programs are to be effective, then it is essential that children understand the prosocial message. Calvert and Kotler (2003) asked children aged between about 7 and 11 to indicate what they had learned from their favorite prosocial television programs. Encouragingly, the children could name many such programs and could also describe accurately the lessons conveyed by those programs.

Sprafkin, Liebert, and Poulos (1975) studied the effects of television programs on 6-year-olds. Some watched an episode of *Lassie* in which a boy was seen to risk his life to rescue a puppy from a mine shaft. Other groups of children saw a different episode of *Lassie* in which no helping was involved, or they saw an episode of a situation comedy called *The Brady Bunch*. After watching the program, all the boys had the chance to help some distressed puppies. However, to do so they had to stop playing a game in which they might win a big prize. The children who had watched the rescue from the mine shaft spent an average of over 90 seconds helping the puppies compared to under 50 seconds by those watching the other program.

Sprafkin et al.'s (1975) study monitored the effects of an episode of *Lassie* in terms of its potential to influence prosocial behavior in 6-year-olds.

Hearold (1986) reviewed more than 100 studies on the effects of prosocial television programs on children's behavior. She concluded that such programs do generally make children behave in more helpful ways. Indeed, the beneficial effects of prosocial programs on prosocial behavior were almost twice as great as the adverse effects of television violence on aggressive behavior. However, helping behavior was usually assessed shortly after watching a prosocial television program. There is evidence that the long-term effects are often rather weak or even nonexistent (e.g., Sagotsky, Wood-Schneider, & Konop, 1981).

Mares and Woodard (2005) carried out a meta-analysis of 34 studies concerned with the effects of watching prosocial television content on children's behavior. There were consistently moderate positive effects. The beneficial effects were especially great when children viewed altruistic behavior that could easily be imitated.

ANTISOCIAL BEHAVIOR

There are various forms of antisocial behavior, including shoplifting and vandalism as well as behavior that is aggressive and violent. However, aggression is of particular importance, and will be our central focus (see Chapter 18 for a discussion of aggression in adults). Aggression involves hurting other people on purpose. It is "any form of behavior directed towards the goal of harming or injuring another living being who is motivated to avoid such treatment" (Baron & Richardson, 1993). There can be problems in deciding whether a given piece of behavior is aggressive. Aggression involves the *intent* to harm someone, and it is sometimes difficult to know whether a child intended to cause harm.

There are large changes during the course of development in both the amount of aggression and the types of aggression displayed. The amount of aggression decreases during the first few years of life, but may then increase again. Holmberg (1980) found

Studies have shown boys to be more physically aggressive than girls. However, Bjorkqvist et al. (1992) found that girls show more indirect aggression than boys.

in children of 12 months that 50% of all behavior directed at another child was aggressive. However, this dropped dramatically to 17% at 42 months. Cairns (1986) found that boys (but not girls) showed an increase in aggression between the ages of 9 and 14.

How does the type of aggression change during development? According to Schaffer (1996, p. 279), "As children get older there is a tendency for aggression to become increasingly expressed in verbal rather than physical form. The 2-year-old has little choice but to express anger through direct bodily action; by the age of 10 shaming, humiliation, sarcasm, and teasing have all been added to the repertoire of responses for hurting others."

There are differences between males and females in aggression. Bjorkqvist, Lagerspetz, and Kaukiainen (1992) studied physical aggression, verbal aggression, and indirect aggression (e.g., gossiping; writing unkind notes) in adolescent boys and girls. The boys displayed much more physical aggression than the girls, but the girls showed more indirect aggression than the boys. Tallandini (2004) studied aggressive behavior in boys and girls aged between 4 and 8. She wondered whether there would be gender differences in the types of aggressive behavior in make-believe play situations lacking any immediate social interaction. Boys and girls did not differ in overall levels of aggression. However, boys displayed more physical aggression than girls, and girls tended to show more indirect and verbal aggression than boys.

Most children show reasonable stability in their level of aggression throughout childhood. Eron (1987) found that children who were aggressive at the age of 8 tended to be aggressive at the age of 18. Indeed, those aggressive at the age of 8 were *three* times more likely than other children to have a police record at the age of 18. These same children were also more likely to have been involved in criminal activities and to have behaved violently towards their spouse by the age of 30.

MEDIA INFLUENCES

The average 16-year old in Western society has seen 13,000 violent murders on television, and this presumably has some influence on his/her behavior. There is, indeed, a positive relationship between the amount of television violence children have seen and the aggressiveness of their behavior. Unfortunately, it is hard to interpret this finding. Watching violent programs may cause aggressive behavior. On the other hand, it may be that naturally aggressive children choose to watch more violent programs than nonaggressive children.

Case Study: *St. Helena*

A study was carried out on the island of St. Helena in the south Atlantic, which is best known for the fact that Napoleon spent the last few years of his life there. Its inhabitants received television for the first time in 1995, but there is no evidence of any adverse effects on the children. According to Charlton (1998):

> *The argument that watching violent television turns youngsters to violence is not borne out, and this study on St. Helena is the clearest proof yet. The children have watched the same amounts of violence, and in many cases the same programs as British children. But they have not gone out and copied what they have seen on TV.*

What are the factors preventing television violence from influencing the children of St. Helena? According to Charlton (1998), "The main ones are that children are in stable home, school and community situations. This is why the children on St. Helena appear to be immune to what they are watching."

Why might aggression be increased by watching violent television programs? One possibility is that children learn ways of behaving aggressively from observing people behaving violently, and this behavior may be imitated subsequently. This is what Bandura (1973) referred to as observational learning or modeling. Another possibility is that children gradually become less responsive to (and emotionally concerned by) acts of violence as they see more and more of them on television and in films. This reduced responsiveness may produce an increased acceptance of violent behavior.

Findings

Eron (1987) carried out a major longitudinal study in which over 600 8-year-olds were studied for 22 years. The amount of television watched at the age of 8 predicted well the level of aggression and of criminality at the age of 18. However, the 8-year-olds watching the most television violence were already more aggressive than other 8-year-olds. Thus, it may be that watching violent programs causes aggressive behavior *and* that being aggressive leads to increased watching of violent programs.

Leyens, Camino, Parke, and Berkowitz (1975) studied juvenile delinquents at a school in Belgium. They lived in four dormitories, two of which had high levels of aggressive behavior and two of which had low levels. During a special Movie Week, the boys in two of the dormitories (one high in aggression and the other low) watched only violent movies, whereas the boys in the other two dormitories watched only nonviolent movies. There was an increased level of physical aggression only among the boys watching the violent movies. This effect was much stronger shortly after watching the violent movies than later on. However, the study is limited in that the researchers didn't distinguish clearly between real and pretend aggression.

Comstock and Paik (1991) reviewed more than 1000 findings on the effects of media violence. They found that the short-term effects were stronger than the long-term ones. Five factors increased the effects of media violence on aggressive behavior:

1. Violent behavior is presented as being an efficient way of getting what you want.
2. The person behaving violently is portrayed as similar to the viewer.
3. Violent behavior is presented realistically rather than, for example, in cartoon form.
4. The victim's suffering isn't shown.
5. The viewer is emotionally excited while watching the violence.

More recent research has largely confirmed these findings. Anderson et al. (2003) carried out a meta-analysis on studies of media violence and aggression. Media violence increased the likelihood of aggressive and violent behavior both immediately afterwards and in the long term. There were greater effects of media violence on less severe than on more severe forms of aggression, but they were clearly present at all levels of aggression. In spite of clear evidence that media violence causes aggressive behavior, "Additional laboratory and field studies are needed for a better understanding of underlying psychological processes" (Anderson et al., 2003, p. 81).

There has been a dramatic increase in recent years in the amount of time children spend playing video games, many of which involve violence. What are the effects of playing such video games? Griffiths (2000) reviewed the evidence. Very young children often behave more aggressively after playing a violent video game, but the effects are much smaller in older children.

Is it that aggressive children choose to play aggressive video games, or do the games make children aggressive?

A child attacks a Bobo doll.

SOCIAL LEARNING THEORY

According to Bandura (1973), "The specific forms that aggressive behavior takes, the frequency with which it is displayed, and the specific targets selected for attack are largely determined by social learning factors." More specifically, observational learning or modeling is of great importance in producing aggressive behavior. Observational learning involves imitating or copying the behavior of others. Aggressive behavior can also be acquired when the child's aggressive behavior is rewarded or reinforced by getting his/her own way or by gaining attention.

Bandura tested his theoretical ideas in a famous series of experiments involving a Bobo doll (see Chapter 7). This doll is inflatable and has a weighted base causing it to bounce back when punched. Bandura, Ross, and Ross (1963) showed young children one of two films. One film showed a female adult model behaving aggressively towards the Bobo doll. The other film showed the adult model behaving nonaggressively towards the doll. As predicted, those children who saw the model behave aggressively were much more likely to attack the Bobo doll. Bandura (1965) extended the findings. He found that children were much more likely to copy the adult model's aggressive behavior when it was rewarded than when it was punished.

Observational learning

Of the hundreds of studies Bandura was responsible for, one group stands out above the others—the Bobo doll studies. He made a film of one of his students, a young woman, essentially beating up a Bobo doll. In case you don't know, a Bobo doll is an inflatable, egg-shape balloon creature with a weight in the bottom that makes it bob back up when you knock it down. Nowadays, it might have Darth Vader painted on it, but back then it was simply "Bobo" the clown.

The woman punched the clown, shouting "sockeroo!" She kicked it, sat on it, hit it with a little hammer, and so on, shouting various aggressive phrases. Bandura showed his film to groups of kindergartners who, as you might predict, liked it a lot. They then were let out to play. In the playroom, of course, were several observers with pens and clipboards in hand, a brand new Bobo doll, and a few little hammers.

And you might predict as well what the observers recorded: a lot of little kids beating the daylights out of the Bobo doll. They punched it and shouted "sockeroo," kicked it, sat on it, hit it with the little hammers, and so on. In other words, they imitated the young lady in the film, and quite precisely at that.

This might seem like a real nothing of an experiment at first, but consider: these children changed their behavior without first being rewarded for approximations to that behavior! And while that may not seem extraordinary to the average parent, teacher, or casual observer of children, it didn't fit so well with standard behavioristic learning theory. Bandura called the phenomenon observational learning or modeling, and his theory is usually called social learning theory.

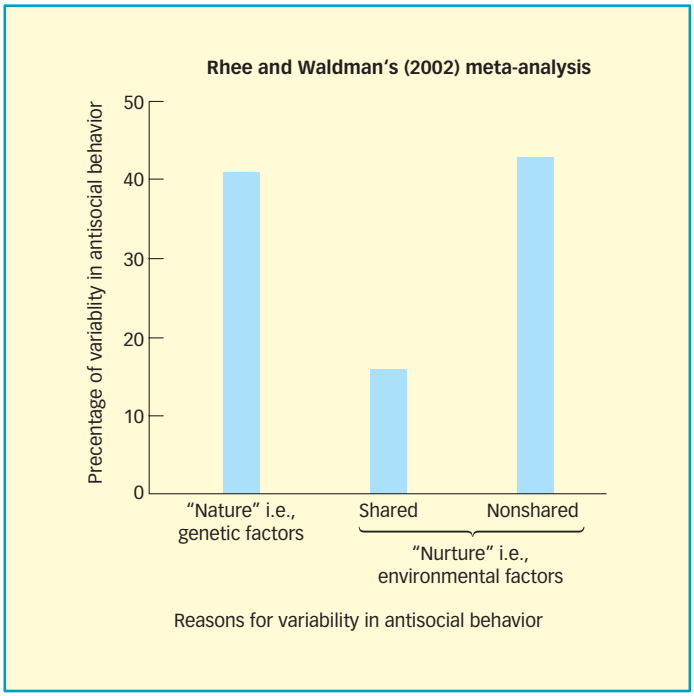
From http://www.ship.edu/~cgboeree/bandura.html

The Bobo doll studies are famous, but they are limited in various ways. First, Bandura didn't distinguish clearly between real aggression and playfighting. Much of the aggressive behavior he observed was only playfighting (Durkin, 1995). Second, while children readily imitate aggressive behavior towards a doll, they are much less likely to imitate aggressive behavior towards another child. Third, children respond to the Bobo doll because of its novelty value. Children who have played with the doll before are only 20% as likely to imitate aggressive behavior against it as children who haven't seen it before (Cumberbatch, 1990).

BIOLOGICAL APPROACH

Bandura emphasized *external* or environmental factors causing aggression. However, we mustn't ignore *internal* factors such as the child's heredity or personality. Rhee and

Waldman (2002) carried out a meta-analysis of twin and adoption studies concerned with antisocial behavior (e.g., aggressive behavior; delinquency). They found that 41% of individual differences in antisocial behavior were a result of genetic factors (see figure on the right). In addition, 43% of individual differences were a result of nonshared environmental influences (those differing among the children within a family), and the remaining 16% were a result of shared environmental influences. The figures were very similar for males and females, and indicate that antisocial behavior is fairly strongly influenced by genetic factors in both sexes.



Eley, Lichtenstein, and Stevenson (1999) argued that we need to distinguish between aggressive antisocial behavior (e.g., fighting; bullying) and nonaggressive antisocial behavior (e.g., theft; truancy). They found with British and Swedish identical and fraternal twins that aggressive antisocial behavior is influenced far more by genetic factors than is nonaggressive antisocial behavior.

There are important interactions between genetic and environmental factors. This can be seen in a study by Yates, Cadoret, and Troughton (1999) on adopted infants whose biological mothers had been put in prison. When these adopted infants with a crime-linked genetic background were brought up in dysfunctional families, they showed substantial antisocial behavior in adolescence. However, when the adopted infants were brought up in favorable homes, they showed no more antisocial behavior than adopted infants without a crime-linked genetic background. Thus, a good family environment can counteract adverse genetic influences

In sum, there is clear evidence that genetic and environmental factors play a role in determining aggressive behavior. However, what is of most importance is the way in which genetic factors *interact* with social and other environmental factors to produce various forms of antisocial behavior.

FAMILY PROCESSES

Patterson (1982) argued that how aggressive any given child is depends very much on family processes. He claimed that what is important is the functioning of the family as a whole rather than simply the behavior of the child or its parents. There is typical mutual provocation in families with a highly aggressive child, with the behavior of the parents and of the child having a coercive quality about it. That means it leads directly to increased aggression by other members of the family.

Findings

Patterson (1982) and Patterson, DeBaryshe, and Ramsey (1989) observed the interaction patterns of families in their homes. There was a typical pattern of escalating aggression in the families of aggressive children. First, the child behaved aggressively (e.g., refusing to do what his mother requested). Second, the mother responded aggressively (e.g., shouting angrily at her son). Third, the child reacted in a more aggressive and hostile way (e.g., shouting back loudly at his mother). Fourth, the mother responded more aggressively than before (e.g., hitting her son). Patterson (1982) called this pattern of behavior a **coercive cycle**: a small increase in aggression by the parent or child is matched or exceeded by the other person's aggressive behavior.

According to Patterson et al. (1989), most aggressive behavior displayed by parents and their children in aggressive families is an attempt to stop the other person being aggressive to them. In fact, however, these attempts often serve to provoke further aggression. Children with this type of aggressive approach are often rejected by their peers, and thus suffer severe problems in social adjustment.

Key Term

Coercive cycle: a pattern of behavior in which aggression by one family member produces an aggressive response, and so on.

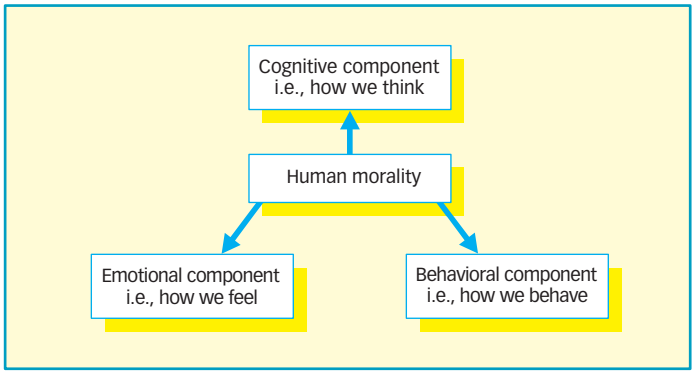
Patterson et al. (1989) also found that parents in aggressive families rarely provided their children with affection or even with encouragement. This lack of attention leads boys to behave aggressively to attract attention from their parents.

Pagani et al. (2004) found evidence of a coercive cycle in a study of 15- and 16-year-old sons and daughters who displayed verbal and physical aggression towards their mothers. In most cases, there had been aggression within the family dating back to early childhood, with parents and children both involved in behaving aggressively. In addition, aggressive parental punishment within the previous 6 months was associated with verbal and physical aggression towards mothers.

In sum, there is convincing evidence that children's aggressive behavior can usefully be considered in terms of family dynamics. As yet, however, the factors responsible for the development of coercive cycles in the first place remain unclear.

MORAL DEVELOPMENT

In this section, we discuss changes in moral development during childhood. According to Shaffer (1993), morality implies "a set of principles or ideals that help the individual to distinguish right from wrong and to act on this distinction." Morality is important because society can't function effectively unless there is reasonable agreement on what is right and wrong. Of course, there are some moral and ethical issues (e.g., animal experimentation) on which members of most societies have very different views. However, if there were controversy on all major moral issues, society would become chaotic.



Human morality has three major components (see figure on the left).

1. *Cognitive*: How we think about moral issues and decide what is right and wrong.
2. *Emotional*: The feelings (e.g., guilt; pride) associated with moral thoughts and behavior.
3. *Behavioral*: The extent to which we behave honorably or lie, steal, and cheat.

It might be thought that any given individual would show consistency among these three components. For example, someone who has high moral standards with the cognitive component would also have high moral standards with the emotional and behavioral components. In fact, however, there are often large discrepancies between components. For example, someone may know at the cognitive level that it is wrong to cheat, but may still cheat at the behavioral level.

KOHLBERG'S THEORY

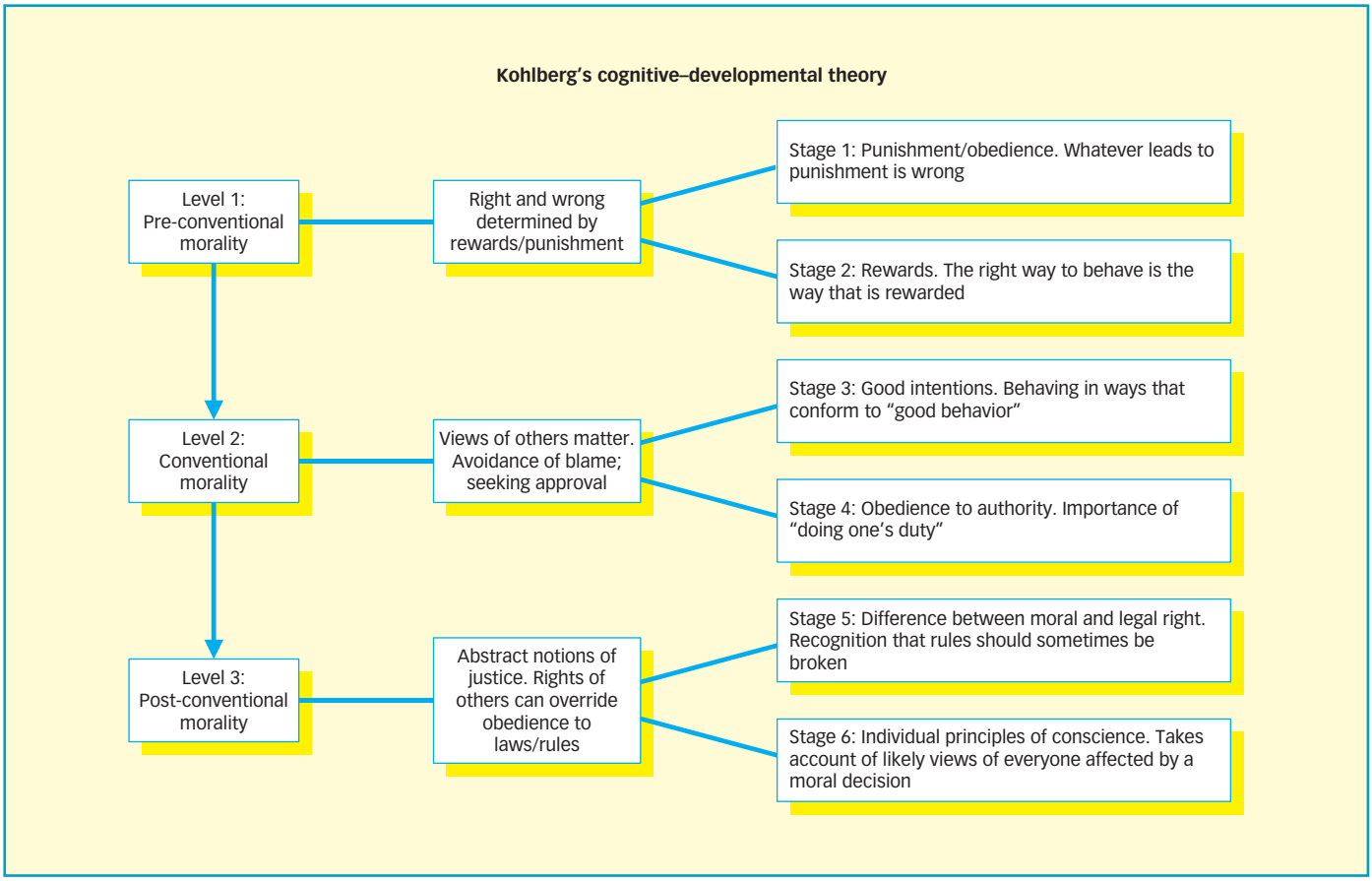
Lawrence Kohlberg (1927–1987) put forward a cognitive–developmental theory of children's morality, based on the assumption that we should focus on children's cognitive structures. Kohlberg argued that all children follow the same sequence of stages in their moral development. What leads them to develop their moral reasoning? According to Kohlberg, disequilibrium or inconsistency among an individual's views provides the motivation for him/her to change and develop his/her moral reasoning.

Kohlberg's theory consists of three levels of moral development with two stages at each level (see the figure on the following page).

Key Term

Pre-conventional morality: the first level in Kohlberg's theory; at this level, moral reasoning focuses on rewards for good actions and punishments for bad actions.

- *Level 1*: **Pre-conventional morality.** What is regarded as right or wrong is determined by the rewards or punishments likely to follow rather than by thinking about moral issues. Stage 1 of this level is based on a punishment-and-obedience orientation. Stealing is wrong because it involves disobeying authority and leads to punishment.



Stage 2 is based on the notion that the right way to behave is the one that is rewarded. There is more attention to the needs of other people than in Stage 1, but mainly on the basis that if you help other people they will help you.

- *Level 2*: **Conventional morality.** The views and needs of others are much more important at Level 2 than at Level 1. At Level 2, children are very concerned to have the approval of others for their actions and to avoid being blamed for behaving wrongly. At Stage 3, the emphasis is on having good intentions and on conforming to most people's views of good behavior. At Stage 4, children believe it is important to do one's duty and to obey the laws or rules of those in authority.
- *Level 3*: **Post-conventional morality.** At Level 3, people recognize that the laws or rules of authority figures should sometimes be broken. Abstract notions about justice and the need to treat other people with respect can override the need to obey rules and laws. At Stage 5, there is a growing recognition that what is morally right may differ from what is legally right. Finally, at Stage 6, the individual takes into account the likely views of everyone who will be affected by a moral decision. In practice, it is rare for anyone to operate most of the time at Stage 6.

Findings

Most of Kohlberg's research involved presenting children with hypothetical moral dilemmas—see Key Study on the following page.

According to Kohlberg, all children follow the same sequence of moral stages. This assumption can be tested by carrying out a longitudinal (long-term) study to see how children's moral reasoning changes over time. Colby, Kohlberg, Gibbs, and Lieberman (1983) conducted a 20-year study of 58 American males. There was a large decrease in Stage 1 and Stage 2 moral reasoning between

Key Terms

Conventional morality:
this is the second level in Kohlberg's theory; at this level, moral reasoning focuses on having others' approval.

Post-conventional morality:
the third level in Kohlberg's theory; at this level, moral reasoning focuses on justice and the need to respect others.

Key Study

Kohlberg (1963): Moral dilemmas

The main experimental approach used by Kohlberg involved presenting his participants with a series of moral dilemmas. Each dilemma required them to decide whether it is preferable to uphold some law or other moral principle or to reject that moral principle in favor of some basic human need. Here is one of the moral dilemmas Kohlberg used:

> *In Europe, a woman was dying from cancer. One drug might save her, a form of radium that a druggist in the same town had recently discovered. The druggist was charging 2000 dollars, ten times what the drug cost him to make. The sick woman's husband, Heinz, went to everyone he knew to borrow the money, but he could only get together about half of what it cost. He told the druggist that his wife was dying and asked him to sell it cheaper or let him pay later. But the druggist said "No." The husband got desperate and broke into the man's store to steal the drug for his wife.*

The moral principle in this dilemma is that stealing is wrong. However, it was the good motive of wanting to help his sick wife that led Heinz to steal the drug. It is precisely because there are powerful arguments for and against stealing the drug that there is a moral dilemma.

Findings obtained from such moral dilemmas led Kohlberg to identify the three levels and six stages of moral reasoning described earlier.

Discussion points

1. How adequate do you find Kohlberg's use of moral dilemmas to study moral development?
2. What do you think of Kohlberg's stage-based approach to moral development?

KEY STUDY EVALUATION

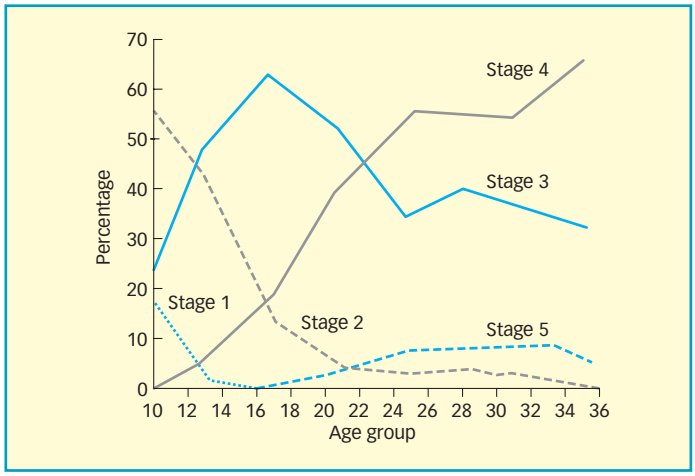
Kohlberg's theory addresses some of the problems of Piaget's approach, in that it is more flexible and less tied to specific age-based stages of development. Meta-analyses have shown that the six stages of Kohlberg's theoretical framework apply across most cultures, and it is almost universally the case that individuals work through the various stages in the same order. However, individual differences in experience or cultural differences may affect the speed with which a person moves through the stages. For example, in some cultures children can work, be married, or be regarded as full members of adult society at much younger ages than Western children. It is possible that these individuals move through Kohlberg's stages much earlier than Western children do. In addition, some Western children's lives do not conform to the stereotypical well-balanced family background with a strong moral sense of right and wrong that seems to lie behind some of Kohlberg's stages. This may also have a profound effect on a child's moral development.

the ages of 10 and 16, with a compensatory increase in Stage 3 and Stage 4 moral reasoning (see the figure on the following page). Most impressively for Kohlberg's theory, all the participants progressed through the moral stages in exactly the predicted sequence. More worryingly for the theory, only about 10% of individuals in their thirties showed Stage 5 moral reasoning, and there was practically no evidence of Stage 6 reasoning.

Dawson (2002) discussed four longitudinal studies on moral development. The findings largely replicated those of Colby et al. (1983), in that there was a clear progression through Kohlberg's various stages. However, there was some evidence that there is an additional stage of moral development occurring between Kohlberg's Stages 3

and 4. Evidence that shifts in moral development can be from a higher to a lower stage was reported by Patenaude, Niyonsenga, and Fafard (2003). They found that 13% of medical students showed a decline in moral development during their first 3 years at medical school. Patendaude et al. speculated that this might be a result of the structure of medical education.

Snarey (1985) reviewed 44 studies from 27 cultures. People in nearly all cultures went through the first four stages of moral development in the same order and at about the same time. There was little evidence of people omitting any stage of moral development or returning to an earlier stage. However, there was more evidence of Stage 5 reasoning in Western cultures than in most rural or village cultures. Snarey argued that this does *not* mean that the moral reasoning of those living in Western cultures is superior. Rather, it reflects the individualistic emphasis of most Western cultures (e.g., the greater value attached to human life).

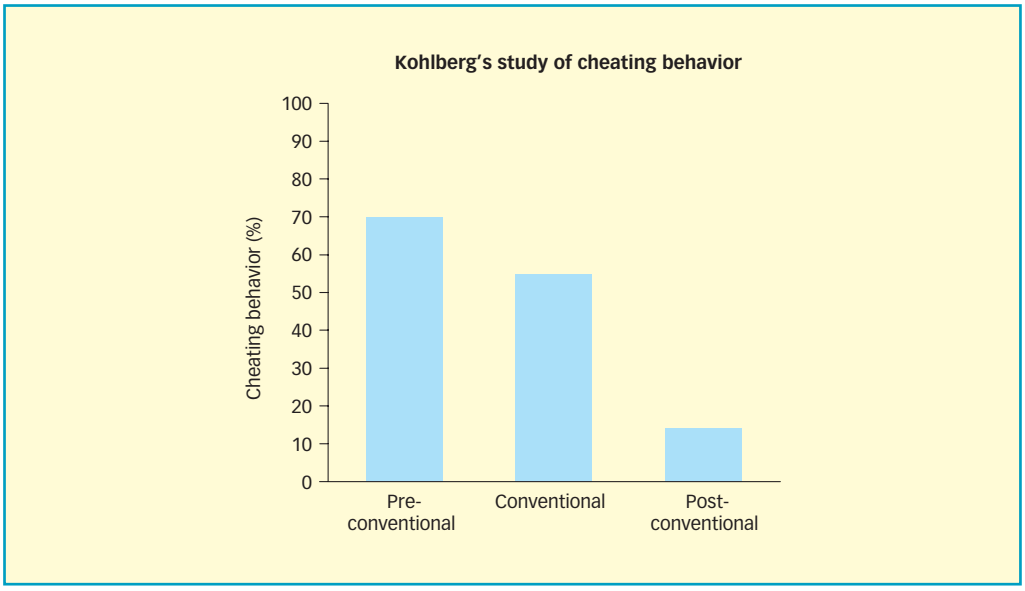


Percentage of individuals aged between 10 and 36 at each of Kohlberg's moral stages of development. Data from Colby et al. (1983).

Walker, Gustafson, and Hennig (2001) tested Kohlberg's hypothesis that disequilibrium or inconsistency in thinking about moral issues motivates children to advance their moral reasoning. They assumed that children whose stage of moral reasoning differed considerably from one moral dilemma to another were in a state of disequilibrium. As predicted, children in a state of disequilibrium were most likely to show a rapid advance to the next stage of moral reasoning.

Does an individual's level of moral reasoning predict his/her behavior? Kohlberg (1975) compared cheating behavior among college students at different levels of moral reasoning. About 70% of students at the pre-conventional level cheated compared to 55% at the conventional level and only 15% at the post-conventional level (see the figure below). Stams et al. (2006) carried out a meta-analysis of 50 studies on moral reasoning in juvenile delinquents. On average, juvenile delinquents were at a much lower stage of moral reasoning than controls, and this was especially the case for delinquents with psychopathic disorder. However, juvenile delinquency was also associated with socioeconomic status, gender, and intelligence.

Finally, cross-cultural studies indicate that there is more diversity in moral reasoning than suggested by Kohlberg. For example, Shweder (1990) compared Hindus in India with Americans living in Chicago. After the death of a relative, Hindus regard eating



Cheating behavior as a function of college students' moral stage. Data from Kohlberg (1975).

chicken or fish, or cutting one's hair, as serious transgressions because they reduce the chances of salvation. None of these acts was regarded as immoral by Americans. In contrast, many children living in Chicago regard sexual inequality as an important moral issue, much more so than children living in India.

Evaluation

- (+) Kohlberg has provided a detailed and accurate description of the development of moral reasoning.
- (+) Disequilibrium or inconsistency seems to motivate children to advance their moral reasoning (e.g., Walker et al., 2001).
- (−) Most people don't develop beyond Stage 4, so Stages 5 and 6 are of limited applicability.
- (−) Kohlberg focused on moral judgments made in response to artificial dilemmas, and these judgments sometimes fail to predict behavior accurately. In addition, people's level of moral reasoning is often higher when confronted by hypothetical problems than when experiencing real-life problems (Walker et al., 1995). The reason is because, "It's a lot easier to be moral when you have nothing to lose" (Walker et al., 1995, pp. 381–382).
- (−) Kohlberg paid insufficient attention to differences in moral reasoning from one culture to another.
- (−) Kohlberg de-emphasized the emotional and behavioral components of morality.

GILLIGAN'S THEORY

Carol Gilligan (1977, 1982) disliked what she regarded as the sexist bias of Kohlberg's approach. Kohlberg initially based his theory on interviews with male participants, so bias may have been introduced. Kohlberg reported that most women were at Stage 3 of moral development whereas men were at Stage 4.

Gilligan (1982) argued that boys develop the morality of justice, in which they focus on the use of laws and moral principles. In contrast, girls develop the morality of care, in which their main focus is on human wellbeing and compassion for others. According to Gilligan, Kohlberg showed sexist bias by regarding the morality of justice as superior to the morality of care. However, note that Kohlberg's theory did include the morality of care. More generally, Gilligan argued that theories of moral reasoning should accord equal importance to the care orientation and the justice orientation.

According to Gilligan and Wiggins (1987), the above gender differences have their origins in early childhood. Women are the main caregivers in most societies, and girls learn the morality of care through their strong attachment to their mother. In contrast, boys are less attached to their mother. They tend to identify with their father, who is often perceived as an authority figure. This identification process leads boys to develop the morality of justice.

Findings

Benenson, Morash, and Petrakos (1998) tested Gilligan's views on the origins of moral orientation. They studied mothers playing with their 4- or 5-year-old children. The girls seemed more attached to their mothers than the boys. For example, girls remained closer to their mothers, had more mutual eye contact with their mothers, and derived more enjoyment from the play session. However, these findings do not necessarily mean that girls identify more strongly than boys with their mothers.

Jaffee and Hyde (2000) carried out a thorough meta-analysis of 113 studies of moral reasoning. Overall, there was a very small tendency for males to show more justice

reasoning than females. There was also a slightly larger tendency for females to show more care reasoning than males. According to Jaffee and Hyde (p. 719):

> *The small magnitude of these effects [the ones just described], combined with the finding that 73% of the studies that measured justice reasoning and 72% of the studies that measured care reasoning failed to find significant gender differences, leads us to conclude that, although distinct moral orientations may exist, these orientations are not strongly associated with gender.*

Schwartz and Rubel (2005) explored related issues in a very large cross-cultural study involving 127 samples in 70 different countries. The importance of 10 basic values to men and women in these countries was assessed. The value of most relevance to care orientation was benevolence, which is concerned with the preservation and enhancement of other people's welfare. As predicted by Gilligan's theory, women regarded benevolence as slightly more important than men. Across the 127 samples, women rated benevolence as a more important value than did men in 114 of them. The findings were less clear with respect to justice orientation. The two values most relevant to justice orientation were self-direction (independent thought and choice of action) and universalism (understanding, tolerance, and protection for the welfare of everyone). Men generally regarded self-direction as slightly more important than women, which is consistent with Gilligan's approach. However, men regarded universalism as slightly less important than women, which seems inconsistent with prediction from Gilligan's theory.

In spite of Schwartz and Rubel's (2005) findings, there is some evidence of interesting differences from one culture to another. Skoe (1998) found as predicted by Gilligan that Canadian and American women between the ages of 17 and 26 showed more complex care-based understanding than men. However, there was no gender difference in care-based understanding in Norway, in which the culture emphasizes gender equality in the workplace and in society generally.

Evaluation

- (+) There is some justification for arguing that Kohlberg exaggerated the importance of the morality of justice and minimized that of the morality of care.
- (+) Several studies have shown that boys have a more advanced morality of justice than girls and that girls have a more advanced morality of care.
- (+) Some gender differences in basic values of relevance to morality that have been found in numerous cultures are consistent with Gilligan's theory.
- (−) Gender differences in type of morality are typically very small.
- (−) Gilligan emphasized the cognitive component in morality at the expense of the behavioral and emotional components.

Chapter Summary

Gender development

- Most gender differences are small. However, girls have less developmental vulnerability than boys and outperform boys in nearly all school subjects in the United Kingdom.
- According to social learning theory, gender development occurs as a result of the child's experiences (especially those involving reward or punishment). Observational learning is also important.

- As predicted by social learning theory, some sex-typed behavior occurs because it has previously been rewarded. However, the theory de-emphasizes the importance of more general learning (e.g., organized beliefs).
- According to gender schema theory, young children develop gender schemas that influence what children attend to and how they interpret the world.
- Gender schema theory de-emphasizes the role of social factors in gender development. Another limitation is that the association between gender schemas and behavior is not very strong.

Prosocial behavior

- Girls show more altruistic behavior than boys across numerous cultures. However, this gender difference is typically smaller when assessed by direct observations rather than by self-report.
- Children and adults in collectivistic cultures exhibit more altruistic behavior than those in individualistic ones, but more altruistic behavior is expected in return in the former cultures.
- According to Hoffman (1987), there are four stages in the development of empathy: global empathy; "egocentric" empathy; empathy for another's feelings; and empathy for another life's condition.
- The amount of prosocial behavior shown by children depends in part on parental behavior (e.g., provision of explicit guidelines; emotional conviction; and attributing prosocial characteristics to the child).
- Watching prosocial television programs can enhance children's prosocial behavior, but the effects are typically rather short-term.

Antisocial behavior

- Boys are more physically aggressive than girls, but girls display more indirect (e.g., verbal) aggression than boys.
- Observing media violence can produce aggressive behavior in children. The short-term effects are generally greater than the long-term ones. They are also greater when violent behavior is presented as being an efficient way of getting what you want, and when the person behaving violently is similar to the observer.
- One of the ways in which children develop aggressive behavior is through observational learning of models.
- Individual differences in aggressive behavior depend in part on genetic factors, especially on interactions between genetic and environmental factors.
- The family dynamics in families with an aggressive child often lead to a pattern of escalating aggression and violence.

Moral development

- Human morality has three components (cognitive; emotional; and behavioral). There are often large discrepancies among these components within an individual.
- According to Kohlberg, there are three levels of moral development: pre-conventional morality; conventional morality; and post-conventional morality. There are two stages at each level.
- Children in nearly all cultures proceed through the first four stages of moral development in the same order and at about the same ages. However, most cultures have some idiosyncratic moral beliefs.
- Gilligan criticized Kohlberg for showing sexist bias by regarding the morality of justice as superior to the morality of care. According to her theory, boys develop the former morality to a greater extent than girls but the opposite is the case with the morality of care.
- There is some support for Gilligan's theory, but the predicted gender differences tend to be very small.

Further Reading

- Berk, L.E. (2006). *Child development* (7th ed.). New York: Pearson. There are up-to-date accounts of the topics discussed in this chapter in this textbook.
- Cole, M., & Cole, S.R. (2004). *The development of children* (5th ed.). New York: Worth. This book provides an introduction to key topics in social development.
- Penner, L.A., Dovidio, J.F., Piliavin, J.A., & Schroeder, D.A. (2005). Prosocial behavior: Multilevel perspectives. *Annual Review of Psychology*, *56*, 365–392. This thorough review includes a discussion of the origins of prosocial behavior.
- Shaffer, D.R. (2004). *Social and personality development* (5th ed.). Belmont, CA: Wadsworth. There is detailed material on topics such as moral development and sex-role identity in this textbook.
- Smith, P.K., Cowie, H., & Blades, M. (2003). *Understanding children's development* (4th ed.). Oxford: Blackwell. Several chapters in this textbook (especially 6 and 8) contain good introductory accounts of the topics discussed in this chapter.

Chapter 16

Contents

16 Attachments and friendships

Human beings are social creatures. As a result, it is not surprising that much of the early learning of infants is in the area of social development. What is of central importance to social development are the warm, positive, and deep relationships infants and children form with other people. This chapter focuses on relationships of all kinds, ranging from weak and short-lived ones to very strong and long-lasting ones. It is probably true that nothing in human development is more important than the formation of such relationships.

Of special importance to infants is the **attachment** (a strong and long-lasting emotional tie) they typically form to their mother or other significant caregiver. The nature and strength of the attachments formed by infants have long-term consequences for their future psychological wellbeing. Some children either never form strong attachments with other adults, or their attachments are disrupted. There has been concern that deprivation (especially maternal deprivation) may have severe long-term effects on children, socially and intellectually.

Children's social and emotional development depends in part on their parents' child-rearing practices. Styles of child rearing vary considerably across cultures. Child-rearing practices reflect the dominant values of the culture—this is one way in which parents pass on those values to the next generation.

The success or otherwise of young children's attachment to their parents or other significant adults forms only part of their social development. Children must also develop social skills and competence so they can interact successfully with other children. Children with friends are happier and more successful than those without.

ATTACHMENT

According to Shaffer (1993), an attachment is "a close emotional relationship between two persons, characterized by mutual affection and a desire to maintain proximity [closeness]." Virtually all developmental psychologists agree it is crucially important for infants and children to form strong attachments.

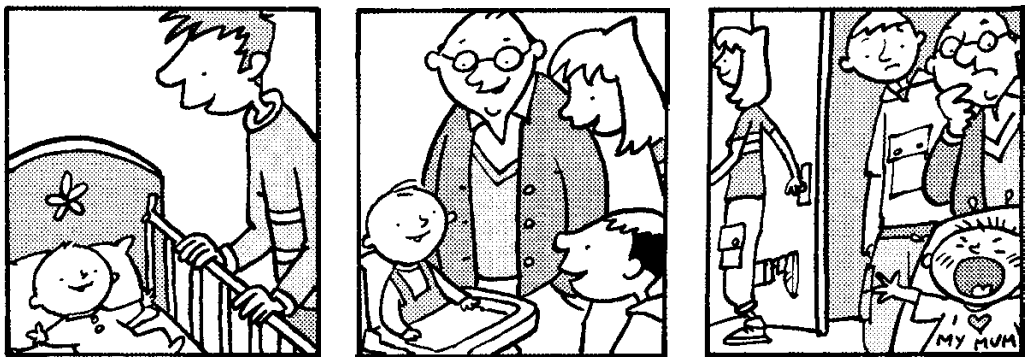
The main attachment of the infant is typically to its mother, but strong attachments can also be formed to other people with whom the infant has regular contact. Weston and Main (1981) studied 44 infants. Twelve were securely attached to both parents, 11 were securely attached only to their mother, 10 were securely attached only to their father, and 11 were insecurely attached to both parents. The first attachment that infants form in early childhood is very important because it is the starting point for their lifelong social and emotional involvement with other people.

Bowlby (1969, 1988) argued that the development of attachment goes through five phases:

1. The infant responds in a similar way to everyone.
2. At around 5 months, the infant starts to *discriminate* among other people (e.g., smiling mainly at his/her mother). This phase witnesses the start of attachment.
3. At around 7 months, the infant remains close to his/her mother or caregiver. He/she shows "separation protest" by becoming upset when his/her mother leaves.

Key Term

Attachment: strong and long-lasting emotional ties to another person.



4. From the age of 3 years, the child–caregiver attachment becomes a goal-corrected partnership. This means the child takes account of the caregiver's needs.
5. From the age of 5 years, the child has an internal working model of the child–caregiver relationship. As a result, the attachment remains strong even when the child doesn't see the caregiver for some time.

STRANGE SITUATION TEST

The most-used way of assessing infants' attachment behavior is by the Strange Situation procedure (Ainsworth & Bell, 1970). The infant (usually about 12 months old) is observed during a sequence of eight short episodes (see the box below). Some of the time the infant is with its mother. At other times, it is with its mother and a stranger, just with a stranger, or on its own. The child's reactions to the stranger, to separation from its mother, and to being reunited with its mother are all recorded. These reactions allow the child's attachment to its mother to be assigned to one of three categories:

1. *Secure attachment*: The infant is distressed by the mother's absence. However, it becomes contented after her return, and there are clear differences between the infant's

The eight stages of the Strange Situation experiment

Stage	People in the room	Procedure
1 (30 seconds)	Mother or caregiver and infant plus researcher	Researcher brings the others into the room and quickly leaves
2 (3 minutes)	Mother or caregiver and infant	Mother or caregiver sits; infant is free to explore
3 (3 minutes)	Stranger plus mother or caregiver and infant	Stranger comes in and after a while talks to mother or caregiver and then to the infant. Mother or caregiver leaves the room
4 (3 minutes)	Stranger and infant	Stranger keeps trying to talk and play with the infant
5 (3 minutes)	Mother or caregiver and infant	Stranger leaves as mother or caregiver returns to the infant. At the end of this stage the mother or caregiver leaves
6 (3 minutes)	Infant	Infant is alone in the room
7 (3 minutes)	Stranger and infant	Stranger returns and tries to interact with the infant
8 (3 minutes)	Mother or caregiver and infant	Mother or caregiver returns and interacts with the infant, and the stranger leaves

reaction to the mother and the stranger. About 70% of American infants show secure attachment.
2. *Resistant attachment*: The infant is insecure in the mother's presence and becomes very distressed when she leaves. It resists contact with the mother when she returns and is wary of the stranger. About 10% of American infants are resistant.
3. *Avoidant attachment*: The infant doesn't seek contact with the mother, and shows little distress when separated from her. The infant avoids contact with the mother when she returns. The stranger is treated similarly to the mother. About 20% of American infants are avoidant.

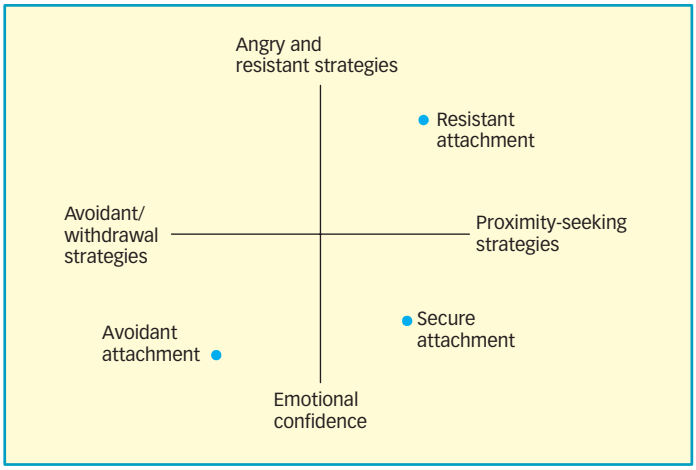
Main, Kaplan, and Cassidy (1985) identified a fourth type of attachment behavior in the Strange Situation: disorganized and disoriented attachment. Infants with this type of attachment lacked any coherent strategy for coping with the Strange Situation, and their behavior was a confusing mixture of approach and avoidance.

Fraley and Spieker (2003) argued that it is an oversimplification to assign all children's attachment patterns to three (or four) categories. For example, two children might both be classified as showing avoidant attachment, but one might display much more avoidant behavior. We can take account of such individual differences by using *dimensions* (going from very low to very high) instead of *categories*. Fraley and Spieker identified two attachment dimensions:

1. *Avoidant/withdrawal vs. proximity-seeking strategies:* This is concerned with the extent to which the child tries to maintain physical closeness to his/her mother.
2. *Angry and resistant strategies vs. emotional confidence:* This is concerned with the child's emotional reactions to the attachment figure's behavior.

As can be seen in the figure on the right, secure, resistant, and avoidant attachment all fit neatly into this two-dimensional framework. The dimensional approach is preferable to the categorical one because it takes much more account of small differences in attachment behavior.

Infant attachment is very important for subsequent development. For example, Wartner, Grossman, Fremmer-Bombik, and Suess (1994) found that attachment classifications at 6 years were very similar to those at 12 months. Stams, Juffer, and Van IJzendoorn (2002) found that children who were securely attached to their mother at 12 months had superior social and cognitive development at the age of 7.

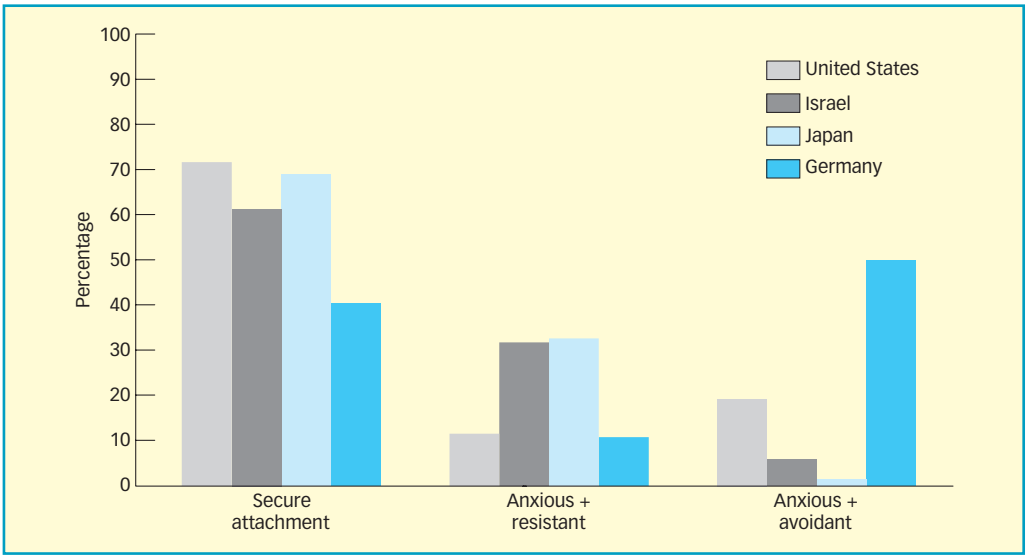


The locations of secure, resistant, and avoidant attachments within a two-dimensional framework (proximity seeking vs. avoidance/ withdrawal, angry and resistant vs. emotional confidence). Based on Fraley and Spieker (2003).

Cross-cultural differences

Sagi et al. (1991) used the Strange Situation test to study attachment behavior in infants in the United States, Israel, Japan, and Germany. Their findings are shown in the figure on the following page. The Israeli infants were less likely than American infants to show avoidant attachment with their mother even though they lived on a kibbutz or collective farm and didn't see much of her. Japanese infants showed a complete absence of avoidant attachment. It is not surprising that none of them treated a stranger similarly to their mother given that historically most Japanese mothers practically never leave their infants alone with a stranger. Durrett, Otaki, and Richards (1984) studied Japanese families in which the mothers were pursuing careers and so had to leave their children in the care of others. Their children showed a similar pattern of attachment styles to that found in the United States.

German infants showed a different pattern of attachment to those from the other three countries. They were less likely to be securely attached and more likely to be avoidantly attached. Why is this? Part of the answer is that German parents regard some



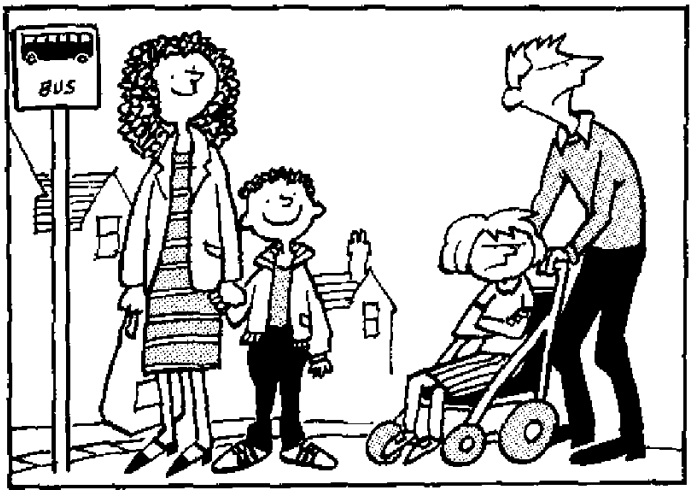
Children from different countries vary in their attachment types. The graph summarizes research from Sagi et al. (1991) and Ainsworth and Bell (1970).

aspects of securely attached behavior as indicating that the infants are spoiled (Sagi & Lewkowicz, 1987). In addition, German parents prefer infants to be independent, non-clinging, and obedient (Grossman et al., 1985).

It is important not to exaggerate cultural differences in attachment. Van IJzendoorn and Kroonenberg (1988) carried out a meta-analysis of studies using the Strange Situation. The variation in attachment style *within* cultures was 1.5 times greater than the variation *between* cultures. That means that the notion there is a *single* British or American culture is an oversimplification. In fact, there are several sub-cultures within most large countries.

Theories of attachment

Why do some infants have a secure attachment with their mother, whereas others don't? Ainsworth, Blehar, Waters, and Wall (1978, p. 152) provided an influential answer with their maternal sensitivity hypothesis: "The most important aspect of maternal behavior commonly associated with the security–anxiety dimension of infant attachment is . . . sensitive responsiveness to infant signals and communications." This hypothesis has received much support. De Wolff and van IJzendoorn (1997) carried out a meta-analysis and reported a correlation of +.24 between maternal sensitivity and security of infant attachment. This indicates a positive (but fairly weak) association. De Wolff and van IJzendoorn also found that aspects of mothers' behavior having only partial resemblance to sensitivity were also important. These aspects included stimulation (any action of the mother directed at her baby) and attitude (mother's expression of positive emotion to her baby).



Most research on the maternal sensitivity hypothesis is correlational and so doesn't prove that differences in maternal sensitivity *cause* differences in security of attachment. Clearer evidence can be obtained by looking at the effects on infant attachment of interventions designed to increase maternal sensitivity. A meta-analysis of relevant studies indicated that such interventions made infants more securely attached (Bakermans-Kranenburg, van IJzendoorn, & Juffer, 2003).

The maternal sensitivity hypothesis exaggerates the role of the mother. Van IJzendoorn and de Wolff (1997) carried out a meta-analysis of studies in which *paternal* sensitivity had been assessed. There was a correlation of +.13 between the father's sensitivity and infant–father attachment. Thus, paternal sensitivity is modestly

associated with the infant's security of attachment to the father. However, the association is smaller than that between maternal sensitivity and security of infant–mother attachment.

Another limitation with the maternal sensitivity hypothesis is that it ignores the role played by the infant himself/herself. We can assess that role by studying pairs of identical twins (sharing 100% of their genes) and fraternal twins (sharing 50% of their genes). If the infant's characteristics influence his/her attachment style, then identical twins should show more agreement than fraternal twins with respect to attachment style. O'Connor and Croft (2001) found modest support for this hypothesis, suggesting that genetic factors probably influence young children's attachment type to a small extent.

We mustn't exaggerate the role played by the infant's genetic make-up and personality in determining its attachment style. There is only a modest tendency for infants' attachment type with their father to be the same as their attachment type with their mother (De Wolff & van IJzendoorn, 1997). This suggests that an infant's attachment to his/her mother and father depends mainly on the characteristics of his/her parents.

Overall Evaluation

- (+) There is convincing evidence of the usefulness of the Strange Situation test and of the three attachment types identified by Ainsworth and Bell (1970).
- (+) Maternal sensitivity has been shown to have a significant effect on infants' attachment behavior.
- (+) Attachment type in infants predicts their subsequent social and cognitive development to some extent.
- (−) The Strange Situation procedure is laboratory-based and rather artificial. Infants' attachment behaviors are stronger in the laboratory than at home (Bronfenbrenner, 1979).
- (−) It has not been clearly established that attachment type in infancy *directly* influences later social and cognitive development.
- (−) Ainsworth and Bell (1970) identified categories of attachment, but a dimensional approach (e.g., Fraley & Spieker, 2003) is more sensitive and thus preferable.

DEPRIVATION EFFECTS

So far we have focused on the attachment that a young child forms with its mother or other caregiver. In the real world, of course, a child's attachments can be disrupted by divorce or the death of a parent, or even prevented from being formed in the first place. In this section, we will discuss the effects on young children of being separated from one or more of the most important people in their lives.

MATERNAL DEPRIVATION HYPOTHESIS

John Bowlby (1907–1990) focused on the relationship between mother and child. According to Bowlby (1951), "An infant and young child should experience a warm, intimate and continuous relationship with his [sic!] mother (or permanent mother-figure) in which both find satisfaction and enjoyment." No one in their senses would disagree with that. However, Bowlby went much further in his controversial maternal deprivation hypothesis. According to this hypothesis, breaking the bond between mother and child during the early years of life often has serious effects on the child's intellectual, social, and emotional development. Bowlby also claimed that many of the negative effects of maternal deprivation are permanent and irreversible. Contrary to popular belief, Bowlby argued that about 25% (rather than 100%) of children suffer

Bowlby endorsed the concept of monotropy, whereby an infant has an innate tendency to become attached to one particular individual.

long-term damage from maternal deprivation (Di Dwyer, personal communication). Finally, Bowlby endorsed **monotropy**, the notion that human infants have an innate tendency to form strong bonds with one particular individual (typically the mother).

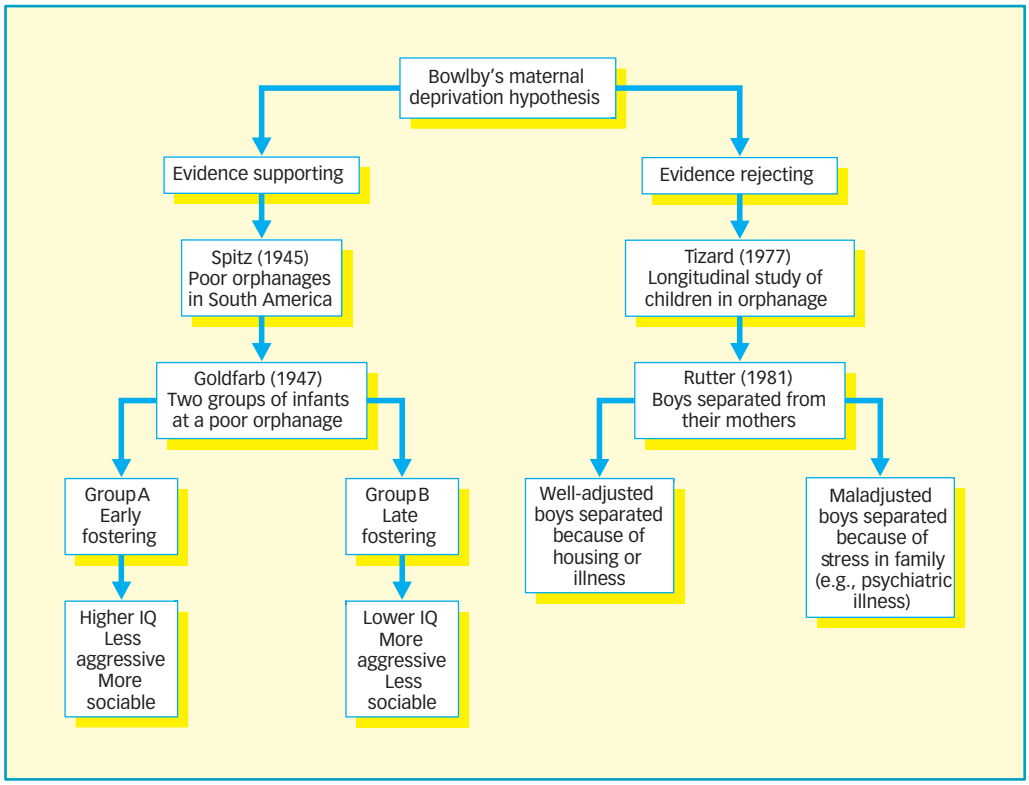
Findings

Bowlby based his maternal deprivation hypothesis in part on the work of Spitz (1945) and Goldfarb (1947). Spitz visited several very poor orphanages and other institutions in South America. Most children in these orphanages were apathetic because they received very little warmth or attention from the staff. Many of these children suffered from **anaclitic depression**, a state involving resigned helplessness and loss of appetite.

Goldfarb (1947) compared two groups of infants from a poor and inadequately staffed orphanage (see the figure below). One group spent 3 years at the orphanage before fostering, whereas the other group spent only the first few months of their lives there before being fostered. Those children who had spent 3 years at the orphanage did less well than the others on intelligence tests over a period of several years after leaving the orphanage. They were also less socially mature and were more likely to be aggressive.

The findings of Spitz (1945) and Goldfarb (1947) provide less support for the maternal deprivation hypothesis than Bowlby assumed. The institutions they studied were deficient in several ways, with the children suffering from a general lack of stimulation and attention as well as maternal deprivation. Thus, we can't be sure whether the problems experienced by the children in these studies were a result of the absence of the mother, the presence of poor institutional conditions, or a combination of both factors.

Bowlby (1946) compared juvenile delinquents who had committed crimes with other emotionally disturbed adolescents who hadn't committed any crimes. Thirty-two percent of the juvenile delinquents (but none of the emotionally disturbed adolescents) showed



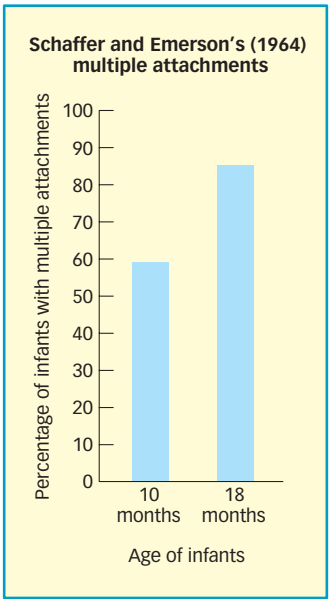
Key Terms

Monotropy: the notion that infants have an innate tendency to form strong bonds with one particular individual (typically the mother).

Anaclitic depression: a condition involving loss of appetite and feelings of helplessness.

affectionless psychopathy, a condition involving a lack of guilt and remorse. Bowlby found that 64% of the juvenile delinquents with affectionless psychopathy had experienced deprivation in early childhood. In contrast, only 10% of the juvenile delinquents *without* affectionless psychopathy had been maternally deprived. These findings suggested that maternal deprivation can lead to affectionless psychopathy. However, subsequent studies failed to replicate the findings.

According to Bowlby's monotropy hypothesis, infants form only one strong attachment (typically to the mother). This hypothesis is simply wrong. Schaffer and Emerson (1964) found that 59% of infants had formed more than one attachment by 10 months (see figure on the right). The figure rose to 87% by 18 months. At the older age, only about half the infants were mainly attached to their mother, with 30% being mainly attached to their father. Thus, relatively few children only have a strong attachment to their mother as assumed by Bowlby.



DEPRIVATION AND PRIVATION

Rutter (1981) argued that Bowlby's (1946) findings on affectionless psychopathy should be re-interpreted based on an important distinction between deprivation and privation. **Deprivation** occurs when a child has formed an important attachment but is then separated from the major attachment figure. In contrast, **privation** occurs when a child has never formed a close relationship with anyone. Many of Bowlby's juvenile delinquents had experienced several changes of home and of principal caretaker during their early childhood. This suggested to Rutter that their later problems were a result of privation rather than of deprivation as Bowlby had claimed.

According to Rutter (1981), the effects of privation are much more severe and long-lasting than those of deprivation. He concluded that privation often leads to "an initial phase of clinging, dependent behavior, followed by attention-seeking, uninhibited, indiscriminate friendliness and finally a personality characterized by lack of guilt, an inability to keep rules and an inability to form lasting relationships."

There were other disagreements between Bowlby and Rutter. According to Bowlby, deprivation in and of itself often causes long-term difficulties. According to Rutter, the effects of deprivation depend on the precise reasons for the separation. Rutter (1981) studied boys aged 9–12 who had been maternally deprived when younger. Most of the well-adjusted boys had been separated from their mothers because of factors such as housing problems or physical illness. In contrast, most of the maladjusted boys had been separated because of problems with social relationships within the family (e.g., psychiatric illness). Thus, family discord rather than separation as such causes difficulties for children.

Bowlby argued that most of the negative effects of maternal deprivation couldn't be reversed or undone, but Rutter and other experts disagreed. Most of the evidence doesn't support Bowlby's position: for example, Tizard (1977, 1986) and Tizard and Hodges (1978)—see the Key Study below.

Key Study

Hodges and Tizard: Long-term effects of privation

Tizard (1977, 1986) and Tizard and Hodges (1978) studied children who had spent up to the first 7 years of their lives in an institution. Each child had been looked after on average by 24 different caregivers by the age of 2, and so they didn't have the opportunity to form a strong continuous relationship with any one adult. Some of these children returned to their own families, whereas others were adopted.

The children's progress was assessed at the ages of 8 and 16. Most of the adopted children had formed close relationships with their adoptive parents. This was less true of the children who had returned to their own families, because their parents were often unsure they wanted their children back. Both groups of children

Key Terms

Affectionless psychopathy: a disorder found among juvenile delinquents involving a lack of guilt and remorse.

Deprivation: the state of a child who has formed a close relationship to someone but is later separated from that person.

Privation: the state of a child who has never formed a close attachment with anyone.

experienced difficulties at school and in forming good relationships with other children.

At the age of 16, the family relationships of the adopted children were as good as those of families in which none of the children had been removed from the family home. However, children who had returned to their families showed little affection for their parents, and their parents were not very affectionate towards them. Both groups of adolescents were less likely than adolescents in ordinary families to have a special friend or to regard other adolescents as sources of emotional support. Overall, however, the adopted children were better adjusted than would have been predicted by Bowlby.

Discussion points

1. How has the research of Hodges and Tizard added to our knowledge of the effects of privation?
2. How might we account for the different patterns of behavior shown by adopted children and children who returned to their families?

KEY STUDY EVALUATION

One of the criticisms of this study is that some of the children "dropped out" before the end of the study. This left a biased sample because children who could not be traced or were not willing to take part may well have been different from those left in the study. In fact Hodges and Tizard reported that those adopted children who remained in the study had earlier shown somewhat more adjustment problems than the restored children who dropped out. This left a "better" sample of adopted children and might explain why they did better.

It is also important to note that there were considerable individual differences within each group: some of the restored children actually had good family relations and some of the adopted children didn't.

As this was a natural experiment, cause and effect cannot be assumed, so it cannot be said that privation causes long-term negative social effects; it can only be inferred.

A few researchers have considered the effects of extreme privation and isolation on children. The resilience of most of these children is surprising. For example, Koluchová (1976) studied identical twin boys (Andrei and Vanya) who had spent most of the first 7 years of their lives locked in a cellar. They had been treated very badly and were often beaten. They could barely talk and relied mainly on gestures. The twins were adopted by extremely dedicated women at about the age of 9. By the time they were 14, their behavior was essentially normal. By the age of 20, they were of above-average intelligence and had excellent relationships with the members of their foster family. They took further education and both married and had children.

Late-placed adoptees from Romania were less able to recover from the severe deprivation they had experienced and go on to develop good cognitive and social skills than those children who had been adopted earlier in life.

Similar findings have been reported in studies on Romanian children exposed to very severe deprivation and neglect in Romania before being adopted by caring British families. O'Connor, Rutter, et al. (2000) compared Romanian children adopted between 24 and 42 months (late-placed adoptees) and those adopted between 6 and 24 months (earlier-placed adoptees). Both groups showed significant recovery from their ordeal in Romania. However, the late-placed adoptees had greater difficulty in achieving good cognitive and social development than earlier-placed adoptees.

Case Study: *The Riley Family*

Jean Riley (54) and her husband Peter (58) adopted two children from Romania who are now aged 17 and 9. Cezarina, when they first saw her, was cross-eyed, filthy, and about 4 years behind in her physical development. First Cezarina's physical problems had to be sorted out, but from then on she made good progress. However, Cezarina is "laid back" about things that seem important to Jean and Peter. Jean understands this attitude, though, because clearly examinations seem less important when a child has had to struggle to survive.

According to Jean, Cezarina is bright, but needs to have information reinforced over and over again. She has also struggled to understand jokes and sarcasm, although this may be due to difficulties with learning the language. Jean sees Cezarina as naive and emotionally immature. Cezarina says herself that initially she was frustrated because she couldn't communicate. She does see herself as being different from other girls, although she likes the same things, such as fashion and pop music. Jean runs The Parent Network for the Institutionalized Child, a group for people who have adopted such children. Cezarina has partly recovered from her poor early experiences. (Account based on an article in *Woman*, September 21, 1998.)

An important study was carried out by Rutter et al. (1998) on 111 Romanian children adopted in the UK before the age of 2. The children arrived with severe developmental impairment, but in 2 years their progress was described as dramatic.

These findings provide further support for the notion that most children are able to recover even from very difficult and distressing childhoods.

Evaluation

- (+) Maternal deprivation often has adverse short- and long-term effects on children.
- (+) As Rutter argued, the negative effects of privation are typically greater than those of deprivation.
- (−) The assumption of the monotropy hypothesis that infants form only one strong attachment is wrong.
- (−) The finding that family discord is more important than maternal deprivation in producing negative effects on children goes against Bowlby's theory.
- (−) Many (or even most) of the adverse effects of maternal deprivation and privation are reversible, especially when the deprivation or privation is relatively short-lived. There is more reversibility of effects than predicted by Bowlby.

DIVORCE AND DAY CARE

Some of the major sources of disruption to children's attachments in Western societies (and in many other cultures) have become much more common in recent decades. For example, fewer than 5% of marriages in the United Kingdom ended in divorce 50 years ago. Nowadays the figure is 40%, and is even higher in the United States. Another major change in most Western societies has been the substantial increase in the number of mothers going out to work. In several countries, very large numbers of young children are put into day care for several days a week while their mothers are at work. In the United States, 80% of children under the age of 6 spend an average of 40 hours in non-parent care every week (National Research Council and Institute of Medicine, 2003). Until the 1960s, this happened only rarely.

We consider possible negative effects on children of these large increases in divorce and in day care. Common sense would suggest that the adverse effects of divorce are much greater than those of day care. Divorce produces a major and permanent change in the situation of the children affected by it. In contrast, children in day care typically experience many hours of loving attention from both parents. However, according to Bowlby's (1969) attachment theory, any disruption of the bond between mother and

child during the first few years of life can impair his/her social and emotional development.

DIVORCE

Children who experience the divorce of their parents typically go through a series of transitions extending over a long period of time. First, there are marital conflicts that are distressing to children. Second, there is the actual separation followed by divorce. Third, various adjustments need to be made by the parents and their children. These often include moving house and having less money available, and the children may have to react to a new relationship as the parents find new partners and perhaps remarry.

Over half of children whose parents divorce lose contact with the parent who isn't looking after them (nearly always the father) within 2 years. The effects are generally more serious than losing one's father through death. Children of divorced parents usually feel their parents chose to divorce even though they were opposed to it (Hetherington, 1989). This creates anger rarely found when the father dies. In addition, children of divorced parents often experience guilt and a sense that they are partially responsible for the divorce.

Findings

Hetherington, Cox, and Cox (1982) studied the effects of divorce on 4-year-old middle-class children over a 2-year period. The first year after divorce was the *crisis phase*. During that time, mothers became stricter than before and were less affectionate. In return, the children (especially boys) behaved more aggressively. During the crisis phase, fathers became less strict and often gave treats to their children.

The *adjustment phase* was usually reached about 2 years after divorce. There was more routine and order about the children's everyday lives. In addition, the mothers had gone back to treating their children in a more patient and understanding way. Overall, there was less emotional distress than in the crisis phase. However, the boys of divorced parents had worse relations and showed more disobedient behavior than boys whose parents hadn't divorced.

Hetherington (1988) found 6 years after divorce that 70% of the mothers had remarried. The children of divorced parents were more independent and had more impact on decision making than those in intact families. Sons still tended to be disobedient with their mothers, who found it difficult to exercise control.

Joint custody vs. sole custody

Bauserman (2002) conducted a meta-analysis of 33 studies between 1982 and 1999 which examined 1846 sole-custody and 814 joint-custody children. The study showed that following parental divorce children in joint-custody arrangements had fewer behavioral and emotional problems, higher self-esteem, better family relations, and better school performance than children in sole-custody arrangements. These children were as well-adjusted as intact-family children on the same measures, possibly because joint custody gives the child an opportunity to maintain continuing contact with both parents.

The findings actually indicate that joint *physical* custody is not the most important factor at all, in fact just spending substantial time with both parents, especially with their fathers, leads to better adjustment. Also, less conflict is reported by joint-custody couples, possibly because both parents could participate in their children's lives equally, as opposed to spending time arguing about childcare decisions. These findings challenge the perception that joint custody exposes children to ongoing parental conflict and therefore is more harmful. The studies in this review showed that higher levels of conflict were reported by sole-custody parents.

This does not mean that joint custody should be given in all situations. Sole custody with one parent would clearly be preferable when the other parent is abusive or neglectful, or has a serious mental or physical health problem. Informed decisions of what environment is best for a child in a custody situation depend on the judges, lawyers, social workers, psychologists, and other professionals involved in divorce counseling and litigation being aware of these findings.

Even 10 years after a divorce, the children involved regarded it as the most stressful event of their lives (Wallerstein, 1987). They felt they had been seriously deprived by not growing up in a family with both parents. Many of the girls feared rejection and betrayal by men.

The effects of parental divorce are very variable. On the one hand, some children of divorced parents suffer long-term adverse effects. O'Connor, Thorpe, Dunn, and Golding (1999) found that women who had experienced divorce in childhood were more likely to be severely depressed than those whose parents hadn't divorced (17% vs. 12%, respectively). On the other hand, some children of divorced parents become very competent and caring adults from coping with the consequences of experiencing divorce (Hetherington & Stanley-Hagan, 1999). Only 2 years after parental divorce, about 80% of children cope and function well (Hetherington, 2002).

It may not just be a stressful home environment that determines the adverse effects of divorce on a child; the child's genes may also be an influencing factor.

Parents who divorce don't only provide their children with a difficult and stressful home environment. They also provide their children's genes. It is thus possible that some of the adverse effects of divorce on children may be a result of their genes rather than of the experience of divorce itself. We can shed some light on this issue by comparing the effects of divorce on children in biological and adoptive families. Children in adoptive families don't share genes with their adoptive parents, and so adverse effects of divorce in such families are a result of environmental factors. In contrast, adverse effects of divorce in biological familes could be a result of genetic factors, environmental factors, or both.

O'Connor, Caspi, Defries, and Plomin (2000) studied the effects of divorce on children in biological families. Mental disorder in children of divorced parents seemed to be due entirely to the effects of the divorce itself. In contrast, genetic factors were partially responsible for adverse effects on self-esteem, social competence, and academic competence in children of divorced parents in biological families.

Similar finding were reported by O'Connor et al. (2003) in a study on the effects of genetic risk (measured by parents' self-reports of negative emotionality) on children's adjustment to parental separation. Children at genetic risk had comparable social adjustment to those not at risk, provided that their parents had not separated. However, genetic risk strongly predicted poor adjustment in children whose parents had separated. These findings suggest that the negative effects of parental separation are significantly greater on children at genetic risk, indicating that genetic factors interact with environmental ones to determine children's adjustment.

DAY CARE

Do infants who spend several days a week in day care suffer as a result? The answer depends on the kinds of caregiving provided while the mother is working and on the nature of the family to which the child belongs. However, it is difficult to interpret the evidence from day-care studies. Children who receive day care may well differ in several ways from those who do not, and so it is generally not clear whether differences between the two groups of children are a result of the day care or the pre-existing differences (see Shpancer, 2006, for a review).

Findings

Evidence that there can be negative effects of day care was reported in a review by Clarke-Stewart (1989). On average, 36% of infants whose mothers worked full time were insecurely attached compared to 29% of infants whose mothers didn't work or worked only part time. As Clarke-Stewart (1989, p. 270) pointed out, the reason for the difference may not be "that 40 hours of day care is hard on infants but that 40 hours of

work is hard on mothers." Harrison and Ungerer (2002) considered the mother's position in families in which she had returned to paid employment during the first year of her infant's life. Infants were less likely to be securely attached to their mother if she wasn't committed to work and had anxieties about making use of child care.

The National Institute of Child Health and Development (NICHD) considered attachment security in more detail. Children in day care were most likely to show insecure attachment if there was a lack of maternal sensitivity and day care was of poor quality (NICHD, 1997).

Finding an association between day-care quality and children's development is *not* sufficient to show that it has a causal effect on children's development. The reason is that children experiencing high-quality day care tend to have parents who are better educated and more responsive than those experiencing low-quality care (Marshall, 2004). Thus, it is difficult to determine whether it is the parenting or the day care that is responsible for the association between day-care quality and children's development.

The above issue was addressed in a large NICHD study in which over 1000 children were studied from birth to 4½ years. When the effects of family environment were controlled, the influence of day-care quality was surprisingly modest (NICHD, 2003). More specifically, day-care quality didn't seem to influence children's social development (e.g., social competence; behavior problems), but had small effects on memory and language quality.

Erel, Oberman, and Yirmiya (2000) carried out several meta-analyses on studies of the effects of day care. They related day care to seven measures of child development:

1. *Secure vs. insecure attachment to the mother.*
2. *Attachment behaviors*: Avoidance and resistance (reflecting insecure attachment), and exploration (reflecting secure attachment).
3. *Mother–child interaction*: Responsiveness to mother, smiling at mother, obeying mother, and so on.
4. *Adjustment*: Self-esteem, lack of behavior problems, and so on.
5. *Social interaction with peers.*
6. *Social interaction with nonparental peers.*
7. *Cognitive development*: School performance, IQ, and so on.

Erel et al. (2000) found that day care had nonsignificant effects on all seven measures described above. This was the case regardless of the amount of day care per week, the number of months the child had had in day care, and the child's gender.

In sum, day care generally has no negative effects on young children. However, some reports suggest extensive day care for infants in the first year of life can have adverse effects on security of attachment (Belsky, 1988) and cognitive development (Baydar & Brooks-Gunn, 1991). Even here the effects are rather small. Thus, the great majority of infants and children don't suffer in any way (socially, emotionally, or cognitively) from spending many hours a week in day care.

PEER RELATIONSHIPS

Children of all ages spend significant amounts of time with their peers (individuals of about the same age) and are interested in social interaction. Tremblay-Leveau and Nadel (1996) used a situation in which an infant was included or excluded from an interaction between the experimenter and another child. Children of 11 months were five times more likely to interact with the other child (e.g., smiling; putting their body between the experimenter and the other child) when excluded than when not excluded.

There is a marked increase in the preference for associating with same-sex peers during the course of development. Maccoby (1998) has reviewed evidence showing that this occurs in numerous cultures around the world. From about the age of 3, children prefer to play with same-sex rather than opposite-sex peers. When they start going to school, the percentage of children associating with same-sex children in the playground

increases steadily between the ages of 4 and 12. This same-sex preference is also found with respect to friendship. A child's best friend between middle childhood and adolescence is typically someone of the same sex.

Rose and Rudolph (2006) considered in detail the differences in same-sex peer friendships in boys and girls, nearly all of which increase during the years of childhood. Girls tend to gain more than boys from such friendships at the emotional level, including greater closeness, affection, trust, and enhancement of worth. However, girls also experience more stress from same-sex friendships (e.g., having a friend tell their secrets; having someone stop being their friend; having a friend stop talking to them). Girls also rely more than boys on same-sex friends for social support when they are stressed. In contrast, boys have a greater tendency than girls to interact in groups with a well-defined dominance hierarchy and to engage in competitive play. This can lead to aggressive behavior. According to Rose and Rudolph, the gender differences in same-sex friendships mean that girls are more vulnerable to developing emotional problems (e.g., low self-esteem; depression). In contrast, boys are more vulnerable to developing behavioral problems (e.g., aggression; antisocial behavior).

A child's best friend between middle childhood and adolescence is usually of the same sex.

Peer relations and romantic relationships

A continuing longitudinal study (Simpson, Collins, Tran, & Haydon, 2007) at the University of Minnesota has tracked 78 individuals through infancy, early childhood, adolescence, and adulthood, monitoring them at 12 months, 6–8 years, 16 years, and early adulthood. The research focus was on attachment, interaction with peers, and close friendships during childhood. The young adults' interactions with romantic partners and their expressions of emotions were also monitored. As well as supporting previous studies on attachment, for example that securely attached infants had higher social competence with their peers in childhood, the study has found that these positive peer relationships seem in their teens to have led to closer and more secure peer friendships. As young adults these people were more expressive and emotionally attached to their romantic peers.

Professor Collins, leader of the research team, says that the current findings highlight one developmental pathway through which significant peer relationship experiences during the early years of life relate to the daily experiences in romantic relationships during early adulthood.

SOCIAL COMPETENCE

There are various ways of assessing how well children relate to their peers. Researchers can use observational techniques to measure social behavior (e.g., smiling; aggressive actions). Another method is to use peer ratings, in which all the children in a group rate each other on one or more social dimensions (e.g., likeability).

Coie, Dodge, and Coppotelli (1982) asked children aged 8, 11, and 14 to identify three classmates they liked most and three they liked least. They used this information to assign the children to five categories:

1. *Popular* (often liked most; seldom liked least)
2. *Controversial* (often liked most; often liked least)
3. *Average* (sometimes liked most; sometimes liked least)
4. *Neglected* (seldom liked most; seldom liked least)
5. *Rejected* (seldom liked most; often liked least).

What factors were associated with being liked most and being liked least? The main factors associated with being liked most were being supportive, cooperating with peers, leading peers, and being physically attractive. The main factors associated with being liked least were disrupting the group, getting into trouble with the teacher, starting fights, and being snobbish.

It would be tempting (but wrong!) to assume that all children assigned to the same category have similar behavior. Cillessen, van IJzendoorn, van Lieshout, and Hartup (1992) found that about half of rejected children were aggressive, and also tended to be uncooperative and dishonest. About one-eighth of the rejected children were submissive and shy, and the remaining rejected children exhibited few extreme forms of behavior. As might be expected, children rejected because they were aggressive were much more likely than the other rejected children to continue to be in the rejected group 1 year later (58% vs. 34%, respectively).

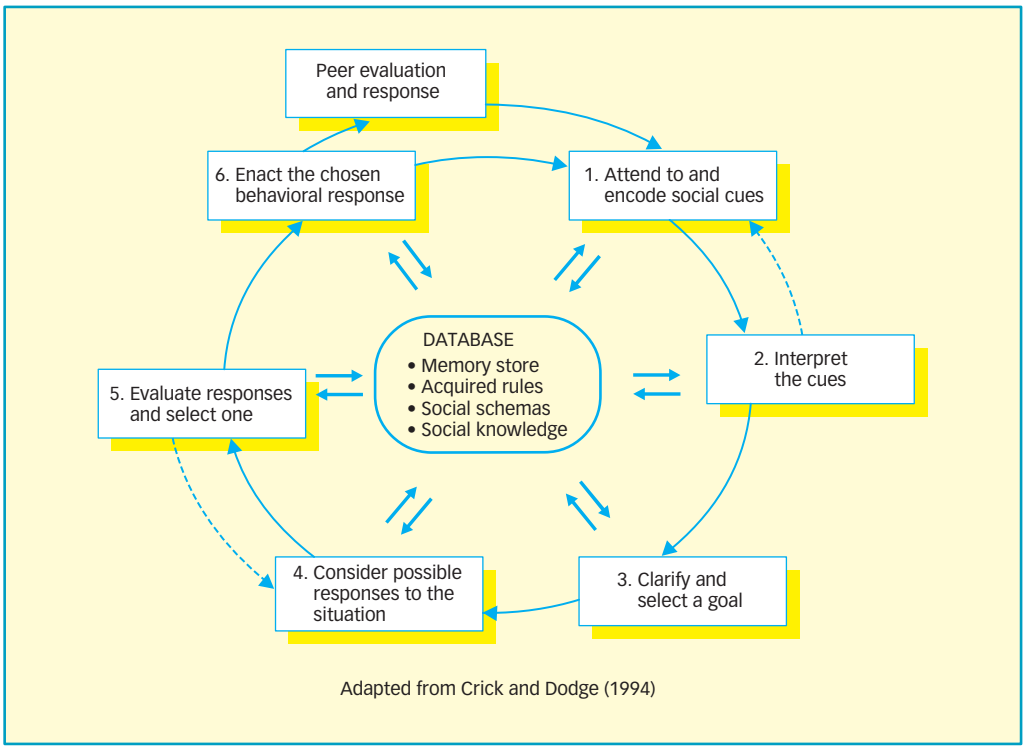
Children neglected or rejected by their peers often experience emotional and/or behavioral problems subsequently. For example, Keiley, Bates, Dodge, and Pettit (2000) discovered that children rejected by their peers in kindergarten had an increased probability of behavioral problems in middle childhood. Miller-Johnson et al. (1999) found an association between childhood rejection by peers and extreme forms of delinquency in adolescence. It is difficult to show that behavioral problems and delinquency are caused by children's difficulties with their peers. Rejected and neglected children tend to live in poverty and to experience harsh parenting (see Deater-Deckard, 2001, for a review), and these factors are also likely to play a part.

What are the key differences between children low and high in social competence? As Lemerise and Arsenio (2000) pointed out, there are two main differences. First, there are cognitive differences, with socially competent children being more skilled at social information processing (Crick & Dodge, 1994). Second, there are emotional differences, with socially incompetent children experiencing many negative emotions and having poor emotional regulation or control (Eisenberg & Fabes, 1992).

Social information processing

Crick and Dodge (1994) put forward a model emphasizing the importance of social information processing (see the figure below). There are six steps in their model, and every step needs to be completed successfully to show social competence:

1. Attend to (and encode) the social cues in a situation (e.g., another child's nonverbal behavior).
2. Interpret or make sense of those social cues (e.g. deciding why someone else has behaved in a certain way).



Adapted from Crick and Dodge (1994)

3. Select a goal or desired outcome for the situation (e.g., making a new friend).
4. Consider possible responses to the situation (e.g., offer help to the other person).
5. Select the response offering the greatest prospect of achieving the desired goal or outcome.
6. Produce the chosen response.

These six steps generally (but not invariably) occur one after the other in the order given above.

How does the model explain higher levels of social competence over time? First, children's database of social knowledge increases with age. As a result, they have more responses from which to choose, and they learn to predict more accurately the likely consequences of producing any given response. Second, children over time show increases in capacity and/or speed of processing, and these increases allow them to process social information more efficiently.

Strassberg and Dodge (1987) showed the importance of Step 2 in the model. Rejected and nonrejected children watched videotapes of other children at play, and interpreted what they saw. Rejected children were more likely than nonrejected children to provide aggressive interpretations of the social interactions in the videotapes. Crick and Ladd (1990) assessed Step 5 in the model. Children were presented with a situation and evaluated what would happen if they responded in a given way. Children rejected by their peers predicted that verbal aggression would produce positive outcomes. In addition, neglected children predicted that behaving assertively would lead to more negative outcomes than did nonneglected children.

Evaluation

- (+) The model provides a detailed account of children's processing of social information.
- (+) Individual differences in processing of social information predict social competence.
- (−) The relationship between social information processing and social competence is fairly weak. Thus, other factors must also be involved.
- (−) Powerful emotions are sometimes involved in social information processing, but Crick and Dodge's (1994) model has little to say about emotional processes.

EMOTIONAL REGULATION

Eisenberg and Fabes (1992) identified two factors influencing social competence:

1. *Emotionality*: This relates to "stable individual differences in the typical intensity with which individuals experience their emotions" (Eisenberg & Fabes, 1992, p. 122).
2. *Emotion regulation*: This involves the ability to control, modify, and manage emotional reactions and behavior.

Children can be assigned to four categories on the basis of whether their emotionality is low or high and whether their emotion regulation is low or high.

What follows from the above theoretical approach? Children low in emotionality (especially negative emotions) and high in emotion regulation should be socially competent and popular with other children. In contrast, children high in emotionality (especially negative emotions) and low in emotion regulation lack social competence and tend to be rejected by their peers.

Eisenberg and Fabes's (1992) theory has been supported by findings from studies in Western and non-Western cultures. Eisenberg et al. (1997) found that American children who had low emotionality and high regulation at one point in time were more socially

competent than other children subsequently. Eisenberg et al. (1996) found that children with high emotionality and low regulation subsequently had poorer social functioning than other children. Eisenberg, Pidada, and Liew (2001) studied children in Java, Indonesia, a collectivistic culture in which emotion regulation is valued very highly. The findings were very similar to those previously obtained in the United States. Eisenberg, Liew, and Pidada (2004) also studied children in Indonesia. The children were 9 years old at the start of the study and 12 at the end. For boys, high regulation and low emotionality at the age of 9 predicted social skills, adjustment, and peer liking 3 years later. The effects were much weaker for girls, in part because most of them were fairly well regulated and socially competent.

Evaluation

- (+) Emotional factors are important to an understanding of individual differences in social competence.
- (+) Emotionality (especially negative emotionality) combined with poor emotion regulation is associated with lack of social competence and rejection.
- (−) The theory doesn't consider the cognitive processes involved in peer interactions.
- (−) The direction of causality is often unclear. For example, high negative emotionality and poor regulation may cause children to be rejected, but rejection may cause increased negative emotionality and impaired regulation.
- (−) The processes responsible for the development of emotion regulation aren't discussed in detail.

FRIENDSHIP PATTERNS

Children with friends are generally better adjusted and happier than those without. However, we must distinguish between the quantity (number) and quality (closeness) of friends. Berndt (1989) obtained some evidence that friendship quality is more important than friendship quantity in a study on 11- and 12-year-old children moving school. Friendship quality was positively related to the friendship support the children received during this period of transition. However, the number of friends was *negatively* related to friendship support.

What are the main characteristics of friendship? Bukowski, Hoza, and Boivin (1994) devised a Friendship Qualities Scale with five sub-scales assessing companionship, closeness, help, security, and conflict. Children aged between 10 and 12 rated friends and other peers on all five sub-scales. Friends received higher scores on four of the sub-scales (companionship, closeness, help, and security). In addition, friends who were still friends 6 months later received higher scores than friends who ceased to be friends. Finally, friends received lower scores than nonfriends on the conflict sub-scale.

Newcomb and Bagwell (1995) obtained similar findings in a meta-analysis to identify factors characterizing friendship relationships more than nonfriendship ones. Not surprisingly, friendships showed more evidence of positive engagement (social contact, talking, cooperation, and positive affect). Friendships were also associated with various relationship properties such as closeness, loyalty, mutual liking, equality, and similarity. Two further factors associated with friendship were conflict management and task activity. Conflict management involved more effective negotiation when conflicts arose, and task activity involved effective focusing on the task in hand.

As might be imagined, children tend to choose as friends those who are similar to them. However, friends are more similar with respect to some attributes than others. Of key importance is reputational salience, which is the importance of any given attribute in determining a child's status. Friends are more similar on attributes having high reputational salience than on those having low reputational salience. Challman (1932) found that friends were generally similar in terms of social cooperation, an attribute having high reputational salience. However, they weren't very similar with respect to intelligence, an attribute having low reputational salience. Haselager, Hartup, van Lieshout, and Riksen-Walraven (1995) found with 11-year-olds that friends were more similar for antisocial behavior (an attribute of high reputational salience) than for prosocial (helpful) behavior or social withdrawal.

Changes with age

It seems likely that the nature of friendship changes in various ways during the course of childhood. This issue was addressed by Newcomb and Bagwell (1995) They found there was a large increase in positive engagement with friends between preschool (up to 5 years) and childhood years (between 6 and 9 years), and a further increase between the childhood years and early adolescence (10–13 years). However, there was also a similar increase in positive engagement with nonfriends.

Newcomb and Bagwell (1995) found more convincing evidence of age-related changes specific to friendship when they considered closeness and loyalty. These relationship properties increased systematically throughout the period from preschool up to early adolescence. Newcomb and Bagwell (1995, p. 340) concluded, "It has been hypothesized that adolescent friendships are characterized by greater intimacy than are the friendships of young children . . . The current meta-analytic findings provide strong empirical support for this age-related difference."

Hartup and Stevens (1997) argued that friendships possess a deep structure and a surface structure. According to them, "We use *deep structure* to refer to the social meaning (essence) of relationships and *surface structure* to refer to the social exchanges that characterize them at any given moment" (Hartup & Stevens, 1997, p. 356). They made two predictions:

1. The deep structure of friendships doesn't change during the course of development;
2. The surface structure of friendships changes systematically during development.

According to Hartup and Stevens (1997), reciprocity or mutuality is of central importance in friendship deep structure. Thus, friendship at all ages is based on a fair balance between giving and taking. However, *what* is given and taken (the surface structure) varies during development. Goodnow and Burns (1985) found that young children's expectations of friendship revolved around concrete reciprocities and common interests (e.g., "And I give them food, so they give me food back," p. 120). Among school children, reciprocity takes the form of shared interests (e.g., "A good friend is someone who likes you and spends time with you and forgives you and doesn't actually bash you up," p. 120).

In adolescence, the types of reciprocity between friends are rather different. When adolescents described their ideal friend, they indicated that he/she was someone who was supportive in the sense of being understanding and trustworthy. Thus, reciprocity or mutuality focuses on common activities in young children, on shared interests during the main schools years, and on emotional reciprocity among adolescents.

Adolescents tend to value support, empathy, and emotional reciprocity in friends.

Evaluation

- (+) It is clearly established that children's friendships possess some similarities (e.g., reciprocity; positive engagement) throughout childhood and adolescence.
- (+) Changes in the nature of children's friendships during development have been shown; these include increases in closeness and complexity.
- (−) Relatively few studies on children's friendships are designed to test clear theoretical predictions.
- (−) Most research has only studied children's friendships at a given point in time. As a result, little is known about reasons for changes over time within friendships. For example, we lack detailed understanding of the processes causing friendships to become stronger or weaker.

PARENTS, PEERS, OR GENES?

The evidence discussed in this chapter (and in the previous one) suggests that children's development is strongly influenced by the way they are treated by their parents. However, matters may not be so simple. Consider, for example, the association between high levels of parental negativity and antisocial behavior in their adolescent children. It may seem natural to assume it is the parents' behavior that causes poor adjustment in the children. However, there are other possibilities. For example, antisocial behavior by children may cause their parents to react in a hostile way. In this section of the chapter we focus on attempts to clarify the meaning of such findings.

BEHAVIORAL GENETICS

Behavioral genetics is an important approach to understanding some causal factors responsible for children's social development. In essence, this approach involves studying the interaction between genetic factors and environmental ones in determining behavior. O'Connor et al. (1998) used the perspective of behavioral genetics to explain the fact that negative parental behavior is associated with antisocial behavior in their children. They studied adopted children, some of whose biological mothers had a history of antisocial behavior prior to the birth of their child. It was assumed that adopted children whose mother had such a history would be genetically at risk for antisocial behavior. The tendency of the adoptive parents to use negative control in the form of hostility, guilt induction, and withdrawal from the relationship was assessed.

O'Connor et al.'s (1998) key finding was as follows: "Children at genetic risk received more negative control from their adoptive parents than children not at genetic risk from middle childhood to early adolescence." Thus, children at genetic risk for antisocial behavior elicit negative behavior from their adoptive parents. Thus, genetic factors in the children influence the association between negative parental behavior and antisocial behavior in children. However, note that O'Connor et al. did *not* find that negative parental behavior is due entirely to genetic factors in their adopted children. Parental behavior depends on numerous factors including financial problems, the quality of the marital relationship, and the parent's own experiences as a child (Hetherington, 1993).

Do parents matter?

David Bell, the Chief Inspector of Schools in England, certainly seems to think so. His statement (2003) that today's rising 5-year-olds are "less prepared to start school than ever" is based on his opinion that social, behavioral, and verbal skills in this group are at an all-time low. He describes these children as unable to listen, settle down, and be quiet. He also says that some are unable to speak properly or use a knife and fork. Bell cites lack of parental discipline and poor stimulation as causes. Others have identified use of television and videos as "child minders" rather than real humans to interact with these children.

What factors determine how similar or dissimilar children within the same family are to each other (e.g., in personality)? Behavioral geneticists identify three relevant factors:

1. Genetic influences.
2. Shared environmental influences, which children of the same family have in common.
3. Nonshared environmental influences, consisting of those influences unique to each child.

Loehlin (1985) studied personality in monozygotic or identical twins, dizygotic or fraternal twins, and in unrelated children brought up in the same household. Identical twins were fairly similar in personality, as was indicated by an average correlation of +.50 across various personality traits. Fraternal twins resembled each other less in personality, with the average correlation being +.30. Of most relevance to the present discussion, unrelated children brought up in the same household had an average correlation of +.07. This means that unrelated children brought up together scarcely resembled each other at all. Thus, in opposition to what might have been expected, shared environment has very little impact on children's personality development. These findings were confirmed in a review by Plomin, Asbury, and Dunn (2001). They concluded that, "Most environmental variance affecting the development of psychological dimensions . . . is not shared by children growing up in the same family" (Plomin et al., 2001, p. 225).

In sum, the evidence suggests that genetic factors account for about 40% of individual differences in personality, and we have seen that shared environment is relatively unimportant. It follows that nonshared environment is of great importance. We turn next to an influential attempt to identify the main nonshared environmental factors influencing children's personality.

GROUP SOCIALIZATION THEORY

Harris (1995) argued that there are two main ways of explaining *why* shared environment has little influence on personality development. First, it is possible that, "parental behaviors have no effect on the psychological characteristics their children will have as adults" (p. 458). Second, children growing up in the same family may have different experiences within the home (e.g., because they are treated very differently by their parents). When I became a parent, I resolved to treat all my children (two girls and a boy) in the same way. However, it rapidly became clear that this wasn't a good strategy, because they all had such different personalities and interests.

Harris (1995, 2000) argued in her provocative and controversial group socialization theory that parents have essentially no long-term effects on their children's personality development. She accepted that children learn much about social behavior within the family environment. However, Harris (1995, p. 462) argued that such learning doesn't generalize to other situations: "Children learn separately how to behave at home (or in the presence of their parents) and how to behave when they are not at home . . . In the home, they may be reprimanded for mistakes and praised when they behave appropriately; out of the home they may be ridiculed for mistakes and ignored when they behave appropriately."

What environmental factors are important in Harris's theory? According to Harris (1995, p. 481), "Experiences in childhood and adolescent peer groups . . . account for environmental influences on personality development." We can relate this assumption to our earlier discussion in which we saw that nonshared environmental factors are much more important than shared ones in determining personality development. According to group socialization theory, experiences in peer groups are the central nonshared environmental factors.

Before turning to the relevant evidence, it is important to clarify the meaning of the term "nonshared environment," which is broader in meaning than is sometimes realized.

As Westen (1998, p. 349) pointed out, "It [nonshared environment] includes shared events to which different children respond differently . . . Thus, early separation from a parent may have a substantially different effect on a child who is temperamentally higher in negative affect than one with an easier temperament, even though the environmental event is identical and hence shared."

Findings

We discussed evidence indicating the importance of relationships with peers earlier in the chapter. For example, Miller-Johnson et al. (1999) found that delinquency in adolescence often followed on from childhood rejection by peers. Deater-Deckard (2001) reviewed evidence showing that peer rejection and avoidance of peer interaction in childhood are both associated with subsequent emotional and behavioral problems (e.g., antisocial behavior). As discussed earlier, Rose and Rudolph (2006) found that girls' same-sex friendships focus on emotional closeness whereas those of boys focus on competition and achievement. These differences plausibly play some role in the development of sex-typed differences in adult life.

A key prediction from the theory is that parental and family influences on children's social development should be very small. Some of the evidence discussed earlier is consistent with that prediction. For example, O'Connor et al. (1998) found that some of the apparent effects of parental behavior on children's behavior were caused by genetic factors in the children. Such evidence suggests that many theorists may have exaggerated the importance of parental factors in determining children's development.

According to Harris (1995, 2000), the effects of parental behavior on their children should be limited to the home environment. Forgatch and DeGarmo (1999) observed the effects of an intervention program designed to improve parental child-rearing style. The intervention produced significant improvement in the children's behavior at home, but had no effect on teachers' ratings of the children when at school.

Harris de-emphasized the importance of environmental influences operating within the family. Evidence apparently inconsistent with that notion was reported by Paulhus, Trapnell, and Chen (1999), who studied children differing in birth order within the same family. First-borns tended to be most achieving and conscientious, whereas later-borns were most likely to be liberal, rebellious, and agreeable.

The finding that nonshared environmental factors are often much more important than shared ones in accounting for individual differences in socialization is consistent with the notion that parents have little influence on their children. However, there are other possibilities. For example, suppose parents treat their children differently, and that this differential treatment influences their development. Such parental influences would be classified as nonshared environmental influences. Alternatively, suppose children respond differently to their parents' behavior. Any effects of such parental behavior on children's development would also be classified as nonshared environmental influences.

Evidence relevant to the issues raised in the previous paragraph was reported by Bergeman et al. (1988). They found that in identical twins brought up apart, high family conflict was associated with increased impulsivity only in children predisposed to impulsivity. Frequent family activities were associated with reduced neuroticism (tendency to experience negative emotions; see Chapter 12) among children predisposed to neuroticism. However, frequent family activities were associated with *increased* neuroticism among children not predisposed to neuroticism. Thus, some nonshared environmental influences reflect the different effects of parental behavior on the children within a family.

One of the most general problems with group socialization theory is the assumption that parental and peer influences are very different from each other. In fact, parents and peers generally share some of the values and beliefs within any given community. Indeed, many parents try through choice of school and other ways to

ensure that most of the peers their child spends a lot of time with have cultural values similar to their own. In addition, it is not simply the case that any given child passively absorbs the values of the peers he/she encounters. Many children will communicate their own values to their peers, and these values will often reflect those of their own parents.

Evaluation

- (+) Group socialization theory is a comprehensive attempt to explain why nonshared environmental factors have much more impact than shared ones on the development of socialization in children.
- (+) Many theorists (including Freud) exaggerated the importance of shared experiences within the family in influencing children's social development.
- (+) Children's experiences in peer groups do seem to have lasting effects on their social development.
- (−) There are various possible explanations of the finding that individual differences in socialization depend heavily on nonshared environmental factors. It is not necessarily the case that parental influences are weak or nonexistent.
- (−) The notion that what children experience in one context (e.g., home) has no impact on their behavior in another context (e.g., at school) is too extreme.
- (−) It is improbable that parents, teachers, and siblings have the very small effects on children's socialization assumed by Harris (1995, 2000).

Chapter Summary

Attachment

- According to Bowlby, young children's development of attachment goes through five phases, during the last of which the child has an internal working model of the child–caretaker relationship.
- Ainsworth's research with the Strange Situation test led her to identify three types of attachment: secure; resistant; and avoidant. It is preferable to focus on two attachment dimensions: avoidant/withdrawal vs. proximity-seeking; and resistant vs. emotional confidence.
- Cross-cultural studies using the Strange Situation test indicate that German infants are less likely to be securely attached and more likely to be avoidantly attached than those from most other countries. More generally, however, the variation in attachment style within cultures is greater than the variation between cultures.
- Any given child's attachment style is determined in part by maternal sensitivity. It is also determined (but to a lesser extent) by paternal sensitivity. In addition, the child's genetic make-up helps to determine its attachment style.

Deprivation effects

- According to Bowlby's maternal deprivation hypothesis, breaking the bond between mother and child during the early years of life often has serious long-term consequences, some of which are permanent and irreversible. For example, Bowlby argued that deprivation in early childhood is common in adolescents with affectionless psychopathy, but this finding has not been replicated.

- Rutter argued with supporting evidence that privation has much more severe effects than deprivation.
- There is convincing evidence that most of the effects of even extreme privation are reversible. This is especially the case when deprivation or privation is relatively short-lived.

Divorce and day care

- Children whose parents divorce typically take years to cope with the consequences. There is an initial crisis phase lasting about 1 year followed by an adjustment phase. Even 10 years after a divorce, the children involved regard it as the most stressful event of their lives.
- Mental disorder in children of divorced parents is a result of the effects of the divorce itself. In contrast, genetic factors play a role in accounting for adverse effects on self-esteem and academic competence in children of divorced parents.
- The quality of day care doesn't influence children's social development but has small effects on memory and language quality.
- When children put into day care are compared with those not put into day care, the differences in terms of social and cognitive development are typically small or nonexistent.

Peer relationships

- There is a marked increase in the preference for associating with same-sex peers rather than opposite-sex peers during the course of development up to the age of about 12.
- Coie et al. proposed five categories of social acceptance: popular; controversial; average; neglected; and rejected. Children neglected or rejected by their peers often develop emotional or behavioral problems subsequently.
- Socially competent children are skilled at social information processing, they have good emotional regulation, and they are low in emotionality.
- Friendship quality is more important than friendship quantity in making children well-adjusted and happy.
- Friendship relationships are associated with positive engagement, closeness, loyalty, mutual liking, and equality.
- Friends tend to be similar with respect to attributes having high reputational relevance.
- The nature of children's friendships changes during development. For example, friendships later in childhood tend to be closer and more complex than those early in childhood.

Parents, peers, or genes?

- The approach known as behavioral genetics has been applied to the finding that negative parental behavior is associated with antisocial behavior in their children. Part of the explanation is that children genetically at risk for antisocial behavior elicit negative parental behavior.
- Behavioral genetics has shown that children's personality is determined much more by nonshared than by shared environmental factors.
- According to Harris's group socialization theory, experiences in peer groups play a major role in children's personality development, whereas parental behavior has only a small impact limited to the home.
- There is some evidence that parental behavior influences children's behavior more at home than at school.
- Group socialization theory de-emphasizes the possibility that parental behavior may contribute to nonshared environmental influences because its effects vary from child to child within the family.

Further Reading

- Berk, L.E. (2006). *Child development* (7th ed.). New York: Pearson. Research on children's attachments and friends is discussed in detail in this textbook.
- Cole, M., & Cole, S.R. (2004). *The development of children* (5th ed.). New York: Worth. The topics dealt with in this chapter are covered at greater length in this American textbook.
- Harris, M., & Butterworth, G. (2002). *Developmental psychology: A student's handbook*. Hove, UK: Psychology Press. Several chapters in this British textbook (e.g., 6 and 14) address the topics discussed in this chapter.
- Shaffer, D.R. (2004). *Social and personality development* (5th ed.). Belmont, CA: Wadsworth. There is a reasonably comprehensive discussion of topics such as attachment and the development of friendships in this book.
- Smith, P.K., Cowie, H., & Blades, M. (2003). *Understanding children's development* (4th ed.). Oxford, UK: Blackwell. Several chapters in this textbook (especially 4 and 5) contain good introductory accounts.

PART V

INTRODUCTION TO Social Psychology

The next four chapters are all concerned with social psychology. According to Hogg and Vaughan (2005, p. 655), social psychology is, "The scientific investigation of how the thoughts, feelings and behavior of individuals are influenced by the actual, imagined or implied presence of others." Other areas of psychology (e.g., cognitive psychology; psychology of emotion) are also concerned with individuals' thoughts and feelings. However, social psychology is different because it focuses on the impact of other people on individuals, even when those other people are not actually present. For example, most people wouldn't drop litter in the street even if no one was observing them (Hogg & Vaughan, 2005), because most people within our society disapprove of such behavior.

In my opinion, social psychology is both the most fascinating *and* the most frustrating area of research in psychology. It is fascinating because most of us enjoy trying to understand our own social behavior and that of our friends and acquaintances. It is frustrating because it has proved very hard to come to grips with the complexities of social behavior. Almost any aspect of social behavior is influenced by so many factors that it is fairly difficult to find a factor having no influence whatsoever!

RESEARCH METHODS IN SOCIAL PSYCHOLOGY

The most important research method in social psychology is experimentation based on use of the experimental method (see Chapter 1). Such experimentation often takes place in the laboratory, but social psychologists also carry out field experiments under naturalistic conditions in the real world. Most experiments in social psychology involve the manipulation of some aspect of the situation (the independent variable) to observe its effects on behavior (the dependent variable). Suppose we want to study the effects of social disapproval (e.g., "Please stop doing that!") on someone's behavior. We will probably find that such effects depend heavily on the current social context. For example, your behavior is more likely to be influenced if the disapproving person is an authority figure (e.g., your boss) and the situation is a formal one than if the disapproving person is a stranger and the situation is an informal one (e.g., a pub).

Social psychologists also have access to several nonexperimental methods. First, there are surveys, in which questionnaires and/or interviews are used to obtain detailed information. One of the advantages of such research is that a considerable amount of information can be obtained from a large number of individuals in a relatively short space of time. Second, there are field studies, in which the researcher simply observes the social behavior of groups (e.g., children in a playground; adolescent gangs). Field studies are rich sources of information, but it is often hard to interpret. Third, there are case studies, in which an individual or a group is studied in great detail. Case studies are especially

Social psychology looks at how the feelings and behavior of individuals are influenced by others—even when they are not there.

valuable in the investigation of rare phenomena (e.g., coping with natural disasters; weird cults). A limitation of most case studies is that the researcher's theoretical convictions may influence his/her interpretation of the evidence.

LEVELS OF EXPLANATION

Social psychology has connections to several other disciplines and areas of psychology. Disciplines such as social anthropology, sociology, and sociolinguistics are all relevant to social psychology, as are areas of psychology such as cognitive psychology and the study of individual differences. It follows that social psychologists use several levels of explanation. Doise (1986) identified four levels of explanation in social psychology:

1. *Intrapersonal level*. This is concerned with each individual's psychological processes (e.g., interpretation of social situations).
2. *Interpersonal and situational level*. This focuses only on the interactions among individuals within a given situation at a given time.
3. *Positional level*. This resembles the previous level, but some account is taken of role or social position (e.g., status, identity) outside of the immediate situation.
4. *Ideological level*. This level is concerned with the impact of general social beliefs and social identity on social behavior.

Social psychology in Europe differs substantially from that in the United States. Most European social psychologists accept that social psychology should encompass all four levels identified by Doise (1986). In contrast, many American social psychologists are mainly interested in the intrapersonal level, especially the ways in which individuals make sense of their social environment.

ORGANIZATION OF CHAPTERS 17–20

We start our coverage of social psychology with Chapter 17. This chapter deals with social cognition, which consists of "cognitive processes and structures that influence and are influenced by social behavior" (Hogg & Vaughan, 2005, p. 655). Most research in this area is at the intrapersonal level–the focus is on the ways in which individuals think about and make sense of their social behavior and that of others. Of all the socially relevant information we have stored in memory, information about ourselves is regarded as being of particular importance. Accordingly, the self-concept is discussed in Chapter 17.

Chapter 18 focuses on our dealings with other people as individuals with an emphasis on the emotional level. For example, if we feel positively about someone else, we are likely to behave in a helpful way towards them. In contrast, we may behave aggressively if we feel negatively about another person. At a more intimate level, close emotional relationships may lead to marriage. Such interpersonal relationships are discussed in Chapter 18.

Chapter 19 deals with various group processes. There are important phenomena associated with groups, including pressures to conform, the emergence of a leader, and the development of group cohesiveness. Explanations for such phenomena are discussed, and there is also an analysis of the behavior of very large groups or crowds.

Chapter 20 addresses various intergroup processes, especially those in which groups are in conflict. The main topics in this chapter are prejudice and discrimination, and what can be done to reduce them. There is also a consideration of stereotypes, because we need to know why and how people form stereotypes of other groups in society in order to understand prejudice fully.

In sum, there is a natural progression as we move through the chapters, with the focus expanding from the individual through groups and on to relationships between groups. Chapter 17 focuses on individual thoughts and cognitive structures, Chapter 18 deals mainly with our treatment of other individuals, Chapter 19 analyzes group phenomena, and Chapter 20 provides explanations of intergroup conflict. As you can see, the scope of social psychology is very broad!

Chapter 17

Contents

Social cognition 17

INTRODUCTION

This chapter deals with cognitive approaches to social psychology. Such approaches have become of increasing interest and importance in recent decades. They involve an emphasis on **social cognition**, "the cognitive processes and structures that influence and are influenced by social behavior" (Hogg & Vaughan, 2005, p. 655). Most research in this area is at the intrapersonal level, meaning that the focus is on the ways in which individuals think about and make sense of their own social behavior and that of others.

We begin our discussion of social cognition with attitudes, which involve beliefs and feelings about other people, groups, or objects. This is followed by a consideration of the factors that produce attitude change. In everyday life, we try to understand *why* we or other people are behaving in certain ways. Various attribution theories have addressed that issue directly, and form the basis for the next topic in the chapter. Finally, we turn to the self-concept. Of all the socially relevant information we have stored in long-term memory, information about ourselves and our self-concept is especially important.

ATTITUDES

What factors influence our behavior in social situations? Numerous factors are at work, including our personalities, our previous experiences in similar situations, the expectations of others, and our relationships with them. One important way of understanding social behavior is by studying the ways in which individuals think about themselves, about the groups to which they belong, and about other groups in society.

Much early research in social cognition was concerned with attitudes. According to Hogg and Vaughan (2005, p. 645), an attitude is "[a] a relatively enduring organization of beliefs, feelings and behavioral tendencies towards socially significant objects, groups, events or symbols; (b) a general feeling or evaluation—positive or negative—about some person, object or issue." If you want to find out about stereotypes (a type of attitude), read the relevant section in Chapter 20.

MEASUREMENT ISSUES

We cannot observe attitudes directly, but we can measure them indirectly using self-report questionnaires. Participants are presented with statements (e.g., "American movies are generally better than British movies"; "Most American movies are very superficial"). For each statement, they indicate their agreement or disagreement on a five-point (sometimes seven-point) scale (e.g., strongly agree; agree; neither agree nor disagree; disagree; strongly disagree). What I have just described is known as a **Likert scale**.

The greatest problem with this approach is that people may not be honest. They may show **social desirability bias**, deliberately distorting their responses to make them more socially desirable than is actually the case. This is especially likely to occur when their actual attitudes are disapproved of within society (e.g., negative views of minority groups).

There have been various attempts to minimize these problems. First, there is the **bogus pipeline**. Participants are connected to an impressive-looking machine and told the machine will detect any lies they tell. Participants are much more likely to reveal socially undesirable attitudes (e.g., racial and other kinds of prejudice) when attached to the bogus pipeline than when completing attitude scales under standard conditions (see Jones & Sigall, 1971). Tourangeau, Smith, and Rasinski (1997) found that use of the bogus

Key Terms

Social cognition: the cognitive processes involved in making sense of social situations and behavior.

Likert scale: an approach to attitude measurement in which respondents indicate the strength of their agreement or disagreement with various statements.

Social desirability bias: the tendency to provide socially desirable rather than honest answers on questionnaires and in interviews.

Bogus pipeline: a set-up in which participants are attached to a machine they have been told can detect lies.

pipeline led people to admit to cocaine use, frequent oral sex, and excessive drinking. In spite of its effectiveness in reducing social desirability bias, the bogus pipeline raises ethical issues (e.g., use of deception; invasion of privacy).

Second, we can assess **implicit attitudes**, which are outside conscious awareness and control. For example, Cunningham, Preacher, and Banaji (2001) asked participants to decide rapidly whether words had a positive or negative meaning by pressing one key for good words and another key for bad words. Immediately before each word was presented, a white or a black face was presented briefly. Participants' performance was scored by dividing the trials into two sets: (1) the white face followed by a positive word and the black face followed by a negative word; and (2) the white face followed by a negative word and the black face followed by a positive word. Fewer errors were made on trials belonging to the first set. The implication is that the participants had negative implicit attitudes toward blacks. Of interest, a standard self-report questionnaire of explicit attitudes (the Modern Racism Scale) did *not* reveal prejudiced attitudes.

WHY DO WE HAVE ATTITUDES?

Nearly everyone possesses thousands of attitudes, so presumably they must have some value for us. Shavitt (1989) argued that attitudes fulfill four major functions:

1. *Knowledge function*: Attitudes toward objects provide an efficient and relatively effort-free way of responding to them.
2. *Utilitarian function*: Attitudes assist us in behaving in ways likely to produce rewards and avoid punishments. In general, our attitudes toward any given object are favorable or unfavorable on the basis of our relevant past experience.
3. *Self-esteem maintenance*: Attitudes can lead us to align ourselves with liked objects (e.g., a successful football team), and this can maintain our self-esteem.
4. *Social identity function*: Attitudes provide a way of expressing our personal values and identifying with social groups perceived as endorsing the same attitudes.

ATTITUDES AND BEHAVIOR

What is the relationship between attitudes and behavior? It seems reasonable to assume that our attitudes are important in determining our behavior toward the objects of those attitudes. This plausible assumption has received surprisingly modest empirical support. LaPiere (1934) showed how great a difference there can be between attitudes and behavior. He was a white man who traveled around the United States with a young Chinese couple. LaPiere found that only one out of 66 hotels turned them away, and they were served at all 184 restaurants at which they stopped. Afterwards, LaPiere sent a letter to all the establishments asking whether they would accept Chinese guests. In all, 128 of the establishment owners replied, and more than 90% of them said they would not!

The above findings are not unusual. Wicker (1969) summarized the findings from 32 studies in which the relationship between attitudes and behavior was examined. The correlation between attitude and behavior rarely exceeded +.3, and the mean correlation was only +.15.

There is not always a large discrepancy between attitudes and behavior. For example, there is a fairly strong relationship between people's attitudes toward major political parties and their actual voting behavior (see Franzoi, 1996). What factors determine the strength of the association between attitudes and behavior? First, it matters whether attitudes and behavior are measured at the same *level of specificity*. *General* measures of attitudes usually fail to predict very *specific* types of behavior. For example, in the LaPiere (1934) study, the behavior of the establishment owners was to a specific, well-dressed, well-spoken Chinese couple, In contrast, the attitude questionnaire the owners completed referred to Chinese guests in general.

Second, there is the time interval. The relationship between attitudes and behavior is weaker when there is a long interval of time between the assessments of attitudes and behavior (6 months in the LaPiere, 1934, study). For example, opinion polls 1 week

Key Term

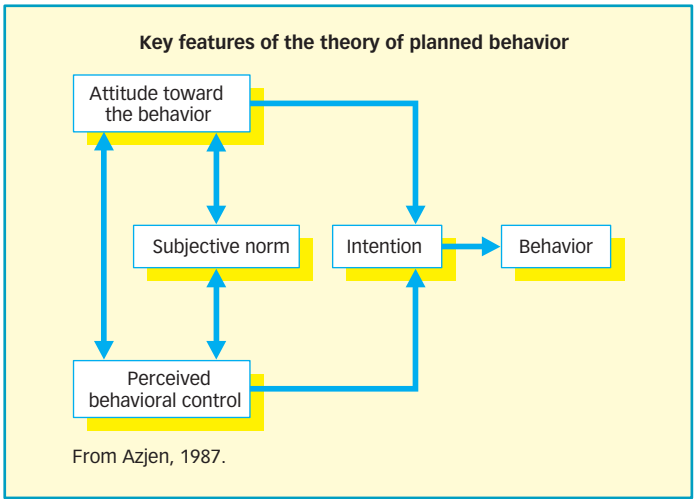
Implicit attitudes: attitudes that are outside conscious awareness and control.

before an election predict voting behavior better than polls 1 month beforehand (Fishbein & Coombs, 1974).

Third, there is *direct* experience. Attitudes formed through direct experience predict behavior much better than do attitudes formed without such experience (Fazio & Zanna, 1981).

THEORIES OF REASONED ACTION AND PLANNED BEHAVIOR

We can often predict behavior from attitudes fairly well provided the research is carried out carefully. However, people's behavior is often strongly influenced by social factors (e.g., Asch, 1951, found strong evidence for conformity pressures; see Chapter 18). Thus, we need theories assuming that behavior depends on attitudes *and* social factors. Fishbein and Ajzen (1975) did this in their theory of reasoned action, subsequently extended into the theory of planned behavior (Ajzen, 1985, 1991; see figure on the right).



The key assumptions of the theory of reasoned action are as follows:

- Measures of attitudes should be compatible [consistent] with measures of behavior in terms of action, object, context, and time.
- Behavior depends in part on a subjective norm reflecting the perceived social pressures to carry out (or avoid) the behavior in question.
- An individual's behavior is determined by his/her behavioral intention (i.e., how he/she intends to behave). This behavioral intention is determined by attitudes towards the behavior and by the subjective norm.
- Attitude towards the behavior depends on behavioral beliefs (beliefs about the likely consequences) and on outcome evaluations (the person's evaluation of each consequence).
- Subjective norms depend on normative beliefs (the extent to which the individual believes other people expect him/her to behave in a certain way) and on motivation to comply (the extent to which the individual wants to conform to those expectations).

Ajzen (1985, 1991) argued that the theory of reasoned action focused only on behavior under the individual's control. Accordingly, he extended the theory by adding perceived behavioral control as another factor, thereby producing the theory of planned behavior. It was assumed that people are more likely to form the intention to perform a particular action if they perceive themselves to have a high level of behavioral control with respect to that action.

The theory of planned behavior is better equipped to handle situations involving a low level of perceived behavioral control. Consider a smoker with very positive attitudes about quitting smoking, where the subjective norm also favors the intention to stop smoking. According to the theory of reasoned action, the smoker would stop smoking. In practice, however, many smokers feel that smoking is an addiction. Such smokers will have low perceived behavioral control, and this leads to the accurate prediction that they will typically be unable to stop smoking.

The theory of planned behavior perhaps accounts better for a dieter's failure to lose weight than the theory of reasoned action. Low perceived behavioral control prevents success.

FINDINGS

Smetana and Adler (1980) obtained questionnaire data from 136 women waiting to learn the results of a pregnancy test. The correlation between intention to have (or not to have) an abortion correlated +.96 with the behavior of those women who were pregnant. Van den Putte (1993) carried out a meta-analysis based on 150 tests of the theory of reasoned action. There were two main findings. First, the overall correlation between attitude plus subjective norm and behavioral intention was +.68. Second, the overall correlation

New Year resolutions, such as attending a gym, do not always last. Despite the intentions (planned behavior) it is past behavior that often determines our actions.

between behavioral intention and behavior was +.62. Thus, the theory provides reasonably accurate predictions of behavior.

Most of the studies considered by van den Putte (1993) were *correlational*, with measures of attitudes, intentions, and behavior being obtained at the same time. Such evidence cannot show that behavior is *caused* by attitudes and intentions. Kraus (1995) carried out a meta-analysis on 88 studies in which attitudes were assessed some time *prior* to behavior. There was an overall correlation of +.38 between attitudes and behavior, suggesting (but not proving) that attitudes can determine behavior.

In spite of the successes of the theory of reasoned action, the theory of planned behavior is preferable. Armitage and Conner (2001) carried out a meta-analysis. They found that perceived behavioral control (only included in the theory of planned behavior) contributed significantly to the prediction of behavior. Overall, the theory of planned behavior accounted for 39% of the variance in intention and 27% of the variance in behavior. The theory was more effective at predicting behavior when behavior measures were self-report rather than objective or observed (accounting for 31% vs. 21% of the variance in behavior, respectively).

Behavior is often predicted better by *past behavior* than by the cognitions or beliefs included in the theories under discussion. Relevant evidence from seven studies was discussed by Conner and Armitage (1998, p. 1438): "Past behavior explained a mean 13.0% of variance in behavior after taking account of intentions and PBC [perceived behavioral control]." For example, Norman and Smith (1995) found that amount of physical exercise was predicted better by the amount of exercise participants had taken in the past than by their cognitions (e.g., intentions).

Ouellette and Wood (1998) argued there are two main ways in which current behavior is influenced by past behavior. First, well-practiced types of behavior typically occurring in a given situation (e.g., using a seatbelt in your car) become habitual and involve automatic processes. Second, poorly learned types of behavior that have been used in several situations are under the control of conscious processes. With these types of behavior, past behavior influences current behavior *indirectly* by altering intentions. Thus, some of the influence of past behavior on current behavior (via altered intentions) can be accounted for by the theory of planned behavior, but some (based on automatic processes) cannot.

Evaluation

- (+) The two theories provide a general framework for understanding the relationship between attitudes and behavior.
- (+) Those factors emphasized by the theories typically influence behavioral intentions and actual behavior.
- (+) The theory of planned behavior is an advance on the theory of reasoned action.
- (−) The theoretical assumption that we make rational decisions about how to behave is limited because our behavior is often influenced by emotional factors.
- (−) The theories explain behavior resulting from a conscious consideration of possibilities. However, people often behave in habitual ways based on automatic or implicit processes. This may explain why very few New Year's resolutions produce lasting changes in behavior.
- (−) The whole approach is based on a limited view of attitudes. According to Böhner (2001, p. 280), these theories "have used a narrow definition of *attitudes towards behavior* (beliefs about the likelihood and value of behavioral consequences) and have relegated the attitude concept to the background as one among many predictors of behavior."

ATTITUDE CHANGE AND PERSUASION

Despite prominent public health campaigns to encourage safer sexual practices, a study in the USA found that only 17% of heterosexuals use condoms regularly.

Why is it important to understand the factors involved in persuasion and attitude change? An important reason relates to the growing field of preventive medicine, in which the emphasis is on preventing diseases from happening. People need to adopt healthier lifestyles for preventive medicine to work, and techniques of persuasion are very important in making this happen.

About 1.5 million Americans are infected with the human immunodeficiency virus (HIV) that causes AIDS. HIV is also common throughout Western Europe and many other parts of the world among both heterosexuals and homosexuals. Thus, it is very important for everyone to minimize the risks of contracting HIV and AIDS. The most effective approach is to use condoms (apart from avoiding all sexual contact!). Persuasive messages have emphasized the importance of using condoms (so-called safer sex), and have emphasized the life-threatening risks of not doing so. However, these messages are generally disregarded. For example, an American study found that only 17% of heterosexuals use condoms regularly (Miller, Turner, & Moses, 1990). Why is this? Kimble, Robinson, and Moon (1992) found that American college students believed (wrongly) that the risks of unprotected sex were very small within a caring relationship.

FIVE FACTORS

How can we persuade someone to change his/her attitudes? According to McGuire (1969), five kinds of factors are involved in persuasion:

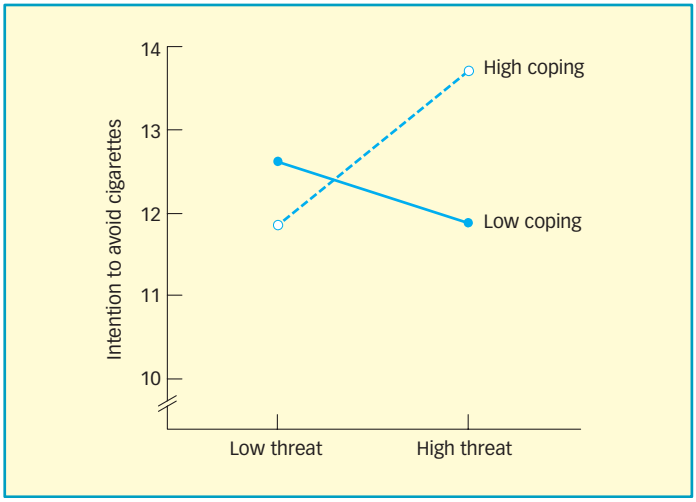
1. *Source*: Sources differ greatly in attractiveness, power, credibility, and so on. Communicators who are trustworthy, attractive, who have expertise and credibility, and who are similar to the receiver of the message usually produce more attitude change than communicators lacking these characteristics (Petty & Cacioppo, 1981). Two biases may lead us to disregard the source's message (Deaux & Wrightsman, 1988): (1) **reporting bias**, when we think the source is unwilling to tell the truth (e.g., most politicians); and (2) **knowledge bias**, when we think the source's knowledge is likely to be inaccurate.
2. *Message*: The information presented may appeal to reason or emotion, it may or may not contain many facts, and so on. Are emotional messages more effective than nonemotional ones? Rogers (1983) addressed this issue in his protection motivation theory. According to this theory, threatening messages initiate two processes:
   (i) Threat appraisal: This involves assessing the severity of the danger and of the individual's vulnerability to the possible consequences.
   (ii) Coping appraisal: This involves the recipient assessing his/her ability to perform the required coping behavior to avoid the negative consequences.

   It follows from this theory that increasing threat leads to stronger intentions to adopt the recommended behavior when coping appraisal is high, but to weaker intentions when coping appraisal is low. Sturges and Rogers (1996) found support for these predictions (see figure on the right). Young adults listened to messages

Key Terms

Reporting bias: the tendency to disregard a message if the source seems untrustworthy.

Knowledge bias: the tendency to disregard a message if the source seems to lack accurate knowledge.



Strength of intention to avoid cigarettes as a function of degree of threat (low vs. high) and ease of coping (low vs. high). Based on data in Sturges and Rogers (1996).

It is easier to persuade people to perform small actions than large ones.

arguing that the dangers of tobacco were modest or great, and that it was easy or difficult to keep away from tobacco.

3. *Channel*: The message may be presented visually or aurally, or both (e.g., television adverts). Chaiken and Eagly (1983) compared attitude change for a message presented in audio, video, or written form. With simple messages, videotape was the most effective and the written form was the least effective. With complex messages, however, the written form was the most effective and audiotape was the least effective. The written form has the advantage with complex messages because it can be processed as slowly as necessary for the recipient to understand it.
4. *Recipient*: The effectiveness of a persuasive message depends in part on the recipient's interest in it, his/her personality, and his/her pre-existing attitudes. Eagly and Carli (1981) found that women are influenced more than men by messages on topics with which men are more familiar. However, the opposite is the case with messages on topics with which women are more familiar. Thus, familiarity and knowledge make us less susceptible to attitude change.

   Duck, Hogg, and Terry (1999) studied the **third-person effect**, the belief that we are personally less influenced than other people by persuasive messages. As predicted, most students said they were less influenced by AIDS adverts than other people.
5. *Target behavior*: People can be persuaded to perform small actions (e.g., voting for a given political party) more easily than large ones (e.g., spending weeks canvassing for that party).

DUAL-PROCESS MODELS

We turn now to models of attitude change. There are two major dual-process models: the elaboration likelihood model (e.g., Petty & Wegener, 1998) and the heuristic-systematic model (e.g., Chaiken, Giner-Sorolla, & Chen, 1996). According to both models, people are generally motivated to hold correct attitudes. However, they may be unable (or unwilling) to process persuasive messages thoroughly.

The elaboration likelihood model assumes that recipients of messages can be persuaded via two distinct routes:

Key Term

Third-person effect: the belief that one is personally less influenced by persuasive messages than most other people.

1. *Central route*: This involves detailed consideration and elaboration of the persuasive message.
2. *Peripheral route*: This involves being influenced more by noncontent aspects of the message (e.g., number of arguments) and by the context (e.g., communicator's

attractiveness or credibility) than by the message content. Individuals using this route pay little attention to the persuasive message.

What determines which processing route will be used? People often use the peripheral route because they have limited time and resources to devote to most messages. However, they will use the central route if their motivation and ability are high. Thus, individuals interested in the topic of the message who possess relevant background knowledge are especially likely to use central processing.

According to the elaboration likelihood model, central processing leads to stronger attitudes than peripheral processing. Central processing produces attitude structures in which the elements are more closely associated and integrated with previous knowledge.

The heuristic-systematic model resembles the elaboration likelihood model in assuming that two kinds of processes can be applied to persuasive messages. Systematic processing closely resembles the central route since it involves thoughtful consideration of message content. It is most likely to be used when messages have personal relevance, and when the recipient already possesses strong attitudes on the message topic. Heuristic processing resembles the peripheral route in requiring little effort and attention. Individuals not very interested in (or knowledgeable about) a persuasive message use simple heuristics or rules of thumb (e.g., "Statistics don't lie"; "Agree with the expert").

When a message is ambiguous, recipients may initially engage in heuristic processing. This heuristic processing may then bias subsequent systematic processing, producing attitudes consistent with the implications of the initial heuristic processing.

What are the main differences between the two models? As Böhner (2001, p. 263) pointed out, "The ELM [elaboration likelihood model] provides the more comprehensive framework, incorporating effortful processing as well as a variety of low-effort processes." However, the heuristic-systematic model provides more specific assumptions about the ways its two processes interact.

Findings

Petty, Cacioppo, and Goldman (1981) tested the elaboration likelihood model and obtained good evidence that there are two separate routes to persuasion (see Key Study below).

Key Study

Petty et al. (1981): Two routes to persuasion

Petty, Cacioppo, and Goldman (1981) tested the elaboration likelihood model. Students read a message strongly supporting the notion that a new large-scale exam should be introduced, with all students having to pass this exam to graduate. Some participants were told this exam might be introduced the following year to provide them with strong motivation to use the central route. The other participants were told there would be no change for 10 years, and so they would not be affected personally. This was designed to produce low motivation to process the essay thoroughly, so they would use the peripheral route. The message was either attributed to a source high in expertise (the Carnegie Commission on Higher Education), or to a source low in expertise (a local high school class). The arguments presented were either strong and based on statistics, or weak and based on personal opinions.

What did Petty et al. (1981) find? For students expected to use the central route, the quality of the arguments was the key factor determining how persuaded they were. For those students expected to use the peripheral route, the source of the

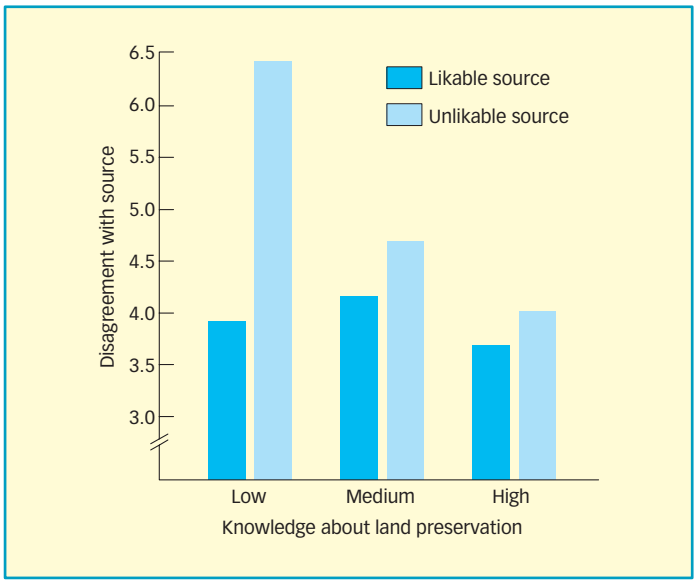
message was the key factor influencing its persuasiveness. Thus, there are two separate routes to persuasion.

Discussion points

1. Do persuasive messages influence you via the central or the peripheral route?
2. What kinds of motivational factors might lead someone to pay close attention to a persuasive message?

KEY STUDY EVALUATION

A possible problem with Petty et al.'s study could be that the groups of participants were not balanced; factors relating to all levels of cognitive processing could be so different between the two groups that their responses could not reasonably be compared. The manipulation of the key variables, that is, quality and source of message, does demonstrate the significance of these factors in determining the response to the message received, but the possibility of intervening variables such as low attention levels and/or low recall levels in the case of the second, peripheral-route group would suggest that direct comparison between the groups would be questionable. The feelings of the participants toward assessments would need to be measured before the study so that later comparison could be made. Students who perform badly in exams in general may respond negatively toward the message, irrespective of its content or context or whether it will affect them directly.



Disagreement with source as a function of knowledge about land preservation (low, medium, or high) and source likability (likable vs. unlikable). Data from Wood and Kallgren (1988).

According to the two models we are considering, central or systematic and peripheral or heuristic processing can be used in parallel (at the same time). Supporting evidence was reported by Wood and Kallgren (1988) in a study in which participants read an account of an interview in which a student described as an expert or a nonexpert, and as likable or unlikable, argued against land preservation. Participants with most knowledge about land preservation made extensive use of central or systematic processing, as shown by their good recall of the message. In addition, they were influenced by the student's expertise, and so used the heuristic or rule of thumb, "Agree with the expert." Thus, these participants used central/systematic *and* peripheral/heuristic processing (see figure on the left)

Chaiken (1987) reported more direct evidence that heuristics influence attitude change. Some participants memorized eight phrases relevant to the heuristic that length implies strength (e.g., "the more the merrier"). The participants then received a message in which the speaker claimed to have two or ten reasons supporting compulsory exams. These participants showed more attitude change when the speaker claimed to have ten reasons rather than two, presumably because they used the heuristics contained in the phrases.

Chaiken and Maheswaran (1994) found that heuristic processing could bias subsequent systematic processing when a message was ambiguous. Their participants received a message about a new answerphone, the XT 100, from a low- or high-credibility source. Source credibility (which affects heuristic processing) *only* influenced systematic processing and attitudes towards the new answerphone when the message was ambiguous.

Evaluation

- (+) The two dual-process models provide more adequate accounts of attitude change than previous theories.
- (+) Attitude change typically depends on contextual information (e.g., likability or expertise of the communicator) as well as on message content.
- (+) Several factors determining whether processing is mainly central/systematic or peripheral/heuristic have been identified.
- (−) The notion that there are only two forms of processing of persuasive messages is oversimplified. In fact, there are numerous forms of processing varying in the amount of effortful message evaluation involved (Petty, 1995).
- (−) It is assumed within the elaboration likelihood model that central and peripheral processes can occur together. However, it is unclear how these processes interact.
- (−) According to the heuristic-systematic model, information not processed systematically influences attitudes via the retrieval of heuristics from memory. However, this assumption has rarely been tested.

COGNITIVE DISSONANCE THEORY

Festinger (1957) proposed an important theory of attitude change. He argued that someone holding two inconsistent cognitions or thoughts experiences **cognitive dissonance** (an uncomfortable state produced by the discrepancy between the cognitions). This motivates the person to reduce the dissonance. This can be done by changing one or both of the cognitions or by introducing a new cognition. Festinger also argued that people will often resolve a discrepancy between their attitudes and behavior by altering their attitudes. Most people have claimed that attitudes determine behavior, but Festinger argued that behavior sometimes determines attitudes.

A common example of cognitive dissonance is found in smokers. They have the cognition or thought that smoking can cause several diseases and they also have the cognition that they often engage in smoking behavior. How can they reduce dissonance? One way is to stop smoking, but another way is to persuade themselves that smoking is less dangerous than generally assumed. Gibbons, Eggleston, and Benthin (1997) found that smokers about to quit smoking regarded it as very dangerous, and this was a factor in them deciding to quit. However, when these same individuals started to smoke again, they perceived smoking to be much *less* dangerous than they had before! This change of attitude helped to justify their decision to resume smoking.

Findings

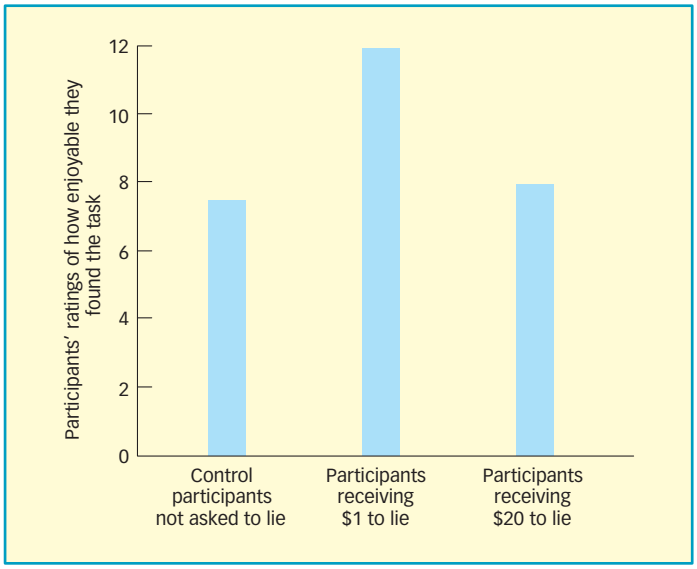
One approach to testing Festinger's theory is by means of **induced compliance**, in which people are persuaded to behave in ways inconsistent with their attitudes. Festinger and Carlsmith (1959) used induced compliance in a study in which participants spent 1 hour performing very boring tasks (e.g., emptying and refilling a tray with spools). The experimenter then asked each participant to tell the next participant that the experiment had been very enjoyable. The participants were offered either $1 or $20 to lie in this way. Finally, all participants provided their honest opinion of how much they liked the tasks they had performed.

Which group do you think expressed more positive views about the experiment? Advocates of operant conditioning (see Chapter 7) might well argue that the experiment was more rewarding for participants receiving $20, and so they should have viewed the experiment more positively. In fact, those receiving only $1 had much more favorable opinions than those receiving $20 (see figure on the following page). According to Festinger and Carlsmith, those receiving $20 could argue that the money was sufficient justification for lying, and so there was little cognitive dissonance. In contrast, those

Key Terms

Cognitive dissonance: an unpleasant psychological state occurring when someone has two discrepant cognitions or thoughts.

Induced compliance: creating **cognitive dissonance** by persuading people to behave in ways opposed to their attitudes.



Data from Festinger and Carlsmith (1959).

receiving $1 had considerable cognitive dissonance. They said the experiment was very enjoyable when they knew it wasn't, and the small amount of money couldn't really justify lying. They couldn't change the lie, so the only way to reduce dissonance was by making their attitude towards the experiment more positive.

Another approach to testing the theory is **effort justification**, in which people exert much effort to achieve some fairly trivial goal. Axsom and Cooper (1985) used this approach. Some female dieters were allocated to a high-effort program, spending a considerable amount of time doing effortful (but irrelevant) tasks such as reading out tongue twisters. Other dieters were allocated to a low-effort program, performing tasks that were irrelevant but much less time-consuming. Women in the high-effort program were much more likely than those in the low-effort program to lose weight (94% vs. 39%, respectively). Women in the high-effort program could only justify the substantial effort they had put into the program by working hard to lose weight. Those in the low-effort program had much less need to justify the time and effort expended.

Festinger (1957) argued that people will only change their attitudes when they attribute their unpleasant internal state to cognitive dissonance. Zanna and Cooper (1974) gave some participants a placebo (inactive) pill, which they were mistakenly told would cause them to feel aroused. When these participants were put into an unpleasant state of cognitive dissonance, they attributed this state to the pill rather than to cognitive dissonance. As a result, they failed to show attitude change.

Evaluation

- (+) Cognitive dissonance theory has been applied successfully to numerous situations.
- (+) There is much support for the prediction that the weaker the reasons for behaving inconsistently with one's attitudes, the stronger the pressure to change those attitudes (Festinger & Carlsmith, 1959).
- (−) The induced-compliance effect wasn't replicated by Choi, Choi, and Cha (1992) with Korean participants. The need for cognitive consistency is probably less strong in collectivistic societies than in individualistic ones (see Chapter 1). Kashima, Siegal, Tanaka, and Kashima (1992) found that Australians believed that consistency between attitudes and behavior was more important than did the Japanese. People in collectivist societies focus on behaving in socially acceptable ways even when their behavior conflicts with their beliefs.
- (−) The theory ignores important individual differences. For example, those high in self-monitoring (using cues from other people to control one's own behavior) experience much less cognitive dissonance than those low in self-monitoring (see Franzoi, 1996).

ATTRIBUTION THEORIES

Key Term

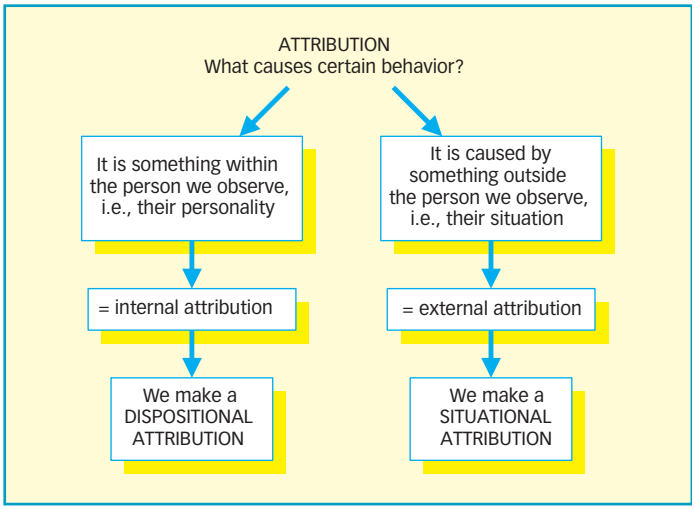
Effort justification: creating a conflict between attitudes and behavior when people make great efforts to achieve a modest goal.

In our everyday lives, it is important to work out *why* other people are behaving in certain ways. For example, suppose someone you have only just met is very friendly. They may genuinely like you, or they may want something from you. It is obviously very useful to understand the reasons for their apparent friendliness.

According to Heider (1958), people are naive scientists who relate observable behavior to unobservable causes. We produce attributions, which are beliefs about the

reasons why other people behave as they do. Heider distinguished between *internal* attributions (based on something within the individual being observed) and *external* attributions (based on something outside the individual) (see figure on the right). Internal attributions are called **dispositional attributions** and external attributions are called **situational attributions**. A dispositional attribution is made when we decide someone's behavior is a result of their personality or other characteristics. In contrast, a situational attribution is made when someone's behavior is attributed to the current situation.

The above distinction can be exemplified by considering a male office worker who works very slowly and inefficiently. A dispositional attribution would be that he is lazy or incompetent. A situational attribution would be that he has been asked to do work inappropriate to his skills or that the company for which he works has failed to monitor sufficiently what he does.



KELLEY'S ATTRIBUTION THEORY

Kelley (1967, 1973) extended attribution theory, arguing that the ways people make causal attributions depend on the information available. When you have much relevant information from several sources, you can detect the *covariation* of observed behavior and its possible causes. For example, if a man is generally unpleasant to you, it may be because he is an unpleasant person or (heaven forbid!) that you are not very likable. If you know how he treats other people, and you know how other people treat you, you can work out why he is unpleasant to you.

In everyday life, however, we often only have information from a *single* observation to guide us in making a causal attribution. For example, you see a car knock down and kill a dog. In such cases, you use whatever information is available. If there was ice on the road or it was a foggy day, this increases the chances you will make a situational attribution of the driver's behavior. In contrast, if it was a clear, sunny day and there was no other traffic on the road, you will probably make a dispositional attribution of the driver's behavior (e.g., he is a poor or inconsiderate driver).

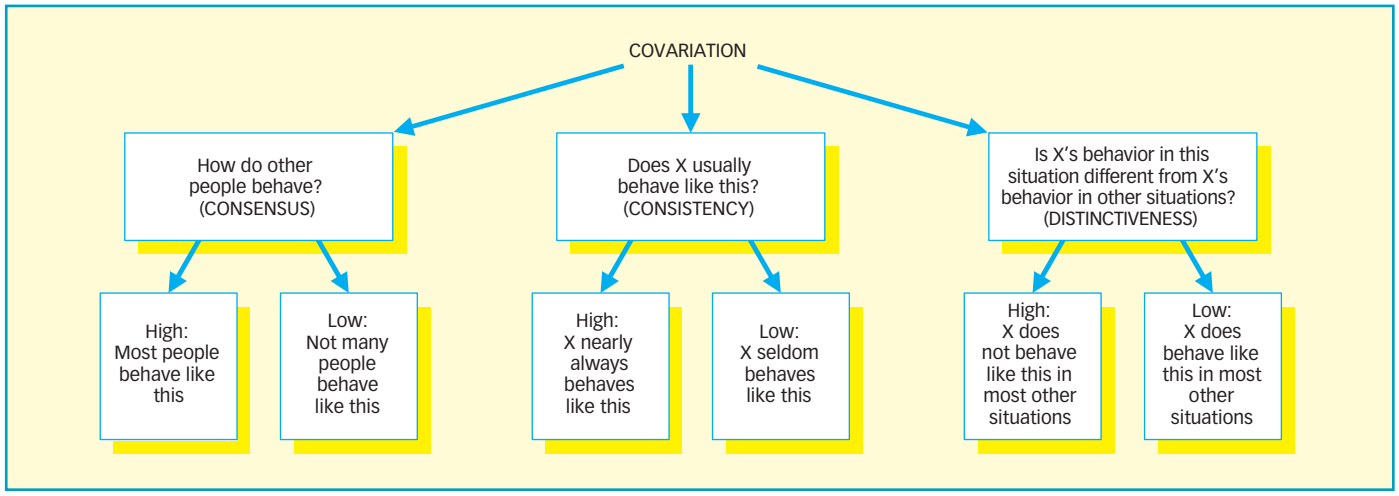
Key Terms

Dispositional attributions: deciding that someone's behavior is caused by their internal dispositions or characteristics.

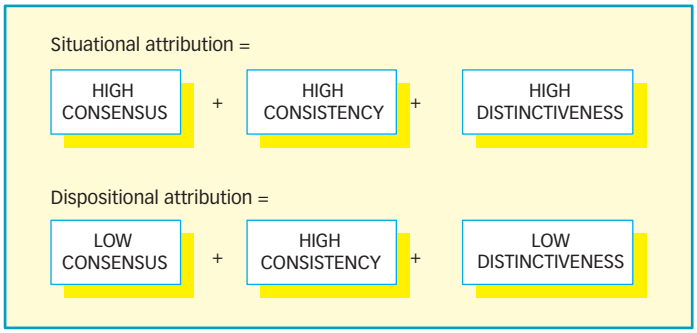
Situational attributions: deciding that someone's behavior is caused by the situation in which they find themselves.

Covariation

According to Kelley (1967), people making causal attributions use the covariation principle. This is defined as follows: "An effect is attributed to a condition that is present



Are we more likely to assume that this man is sleeping rough because of situational factors (he's been taken ill, forgotten his house keys) or dispositional factors (he can't keep a job, he's drunk and rowdy in accommodation, for example)?



when the effect is present, and absent when the effect is absent" (Fincham & Hewstone, 2001, p. 200). This principle is used when the individual has information from multiple observations. We use three types of information when interpreting someone's behavior (see the figure below):

- *Consensus*: The extent to which others in the same situation behave in the same way.
- *Consistency*: The extent to which the person usually behaves in the way he/she is currently behaving.
- *Distinctiveness*: The extent to which the person's behavior in the present situation differs from his/her behavior in the presence of others.

Information about consensus, consistency, and distinctiveness is used when deciding whether to make a dispositional or situational attribution (see figure on the left). If someone's behavior has high consensus, high consistency, and high distinctiveness, we typically make a situational attribution. Here is an example: everyone is rude to Bella; Mary has always been rude to Bella in the past; Mary has not been rude to anyone else. With this information, Mary's behavior is attributed to Bella's unpleasantness rather than her own unpleasantness.

In contrast, we make a dispositional attribution if someone's behavior has low consensus, high consistency, and low distinctiveness. Here is an example: only Mary is rude to Susan; Mary has always been rude to Susan in the past; Mary is rude to everyone else. In this case, Mary's behavior is attributed to Mary's unpleasant personality.

Findings

McArthur (1972) tested Kelley's attribution theory. He presented American participants with the eight possible patterns of information based on the three factors identified by Kelley: high vs. low on consensus, consistency, and distinctiveness. The participants attributed causality for the events described. For example, consider the sentence, "Neil fell asleep during Professor Brown's lecture." The fact that Neil fell asleep might be attributed to the person (i.e., Neil), to the circumstances (e.g., hot lecture theatre), or to the entity (e.g., Professor Brown's lectures are mind-numbingly dull).

What findings would be expected? Suppose Neil has fallen asleep during Professor Brown's lectures in the past, that other students don't, and that Neil also falls asleep in other people's lectures. The fact that Neil fell asleep during one of Professor Brown's lectures should be attributed to Neil (the person). Suppose Neil has fallen asleep during Professor Brown's lectures in the past, that other students do the same, and that Neil doesn't fall asleep in other people's lectures. Neil falling asleep during one of Professor Brown's lectures should be attributed to Professor Brown. Finally, suppose that Neil hasn't slept in the Professor Brown's lectures in the past. This should lead participants to attribute the fact that Neil fell asleep during one of Professor Brown's lectures to the circumstances (e.g., Neil had too much to drink last night).

McArthur (1972) obtained some support for Kelley's theory. However, participants made much less use of consensus information than predicted. Thus, people's causal attributions of an individual's behavior were influenced very little by the information that "almost everyone" or "hardly anyone" behaves in the same way. High consensus suggests that situational factors are strong and low consensus suggests that such factors are weak. The findings suggest that Americans de-emphasize the importance of situational factors when making attributions of behavior. In contrast, Cha and Nam (1985) found that

Korean participants made effective use of consensus information, and thus took account of situational factors. Reasons for cultural differences in attributions are discussed later.

Subsequent research in Western cultures has provided support for the prediction that low consensus, high consistency, and low distinctiveness should be associated with situational attributions. There is also support for the prediction that high consensus, high consistency, and high distinctiveness should be associated with entity attributions (Forsterling, 1989). However, no pattern of the three factors is reliably predictive of circumstance attributions (Fincham & Hewstone, 2001).

Evaluation

- (+) The notion that causal attributions of others' behavior depend on the pattern of information available is very influential.
- (+) There is some support for the covariation principle, and for the importance of consistency, distinctiveness, and consensus.
- (−) In practice, we typically know little about the details of people's actual information processing.
- (−) Experiments testing the theory are mostly very artificial. They provide participants with all the covariation information needed to make causal attributions. In real life, people typically make causal attributions on the basis of much more limited information.
- (−) Even when information about consistency, consensus, and distinctiveness is available in everyday life, it is unlikely that such information typically influences our thinking (Pennington, personal communication).

Fundamental attribution error

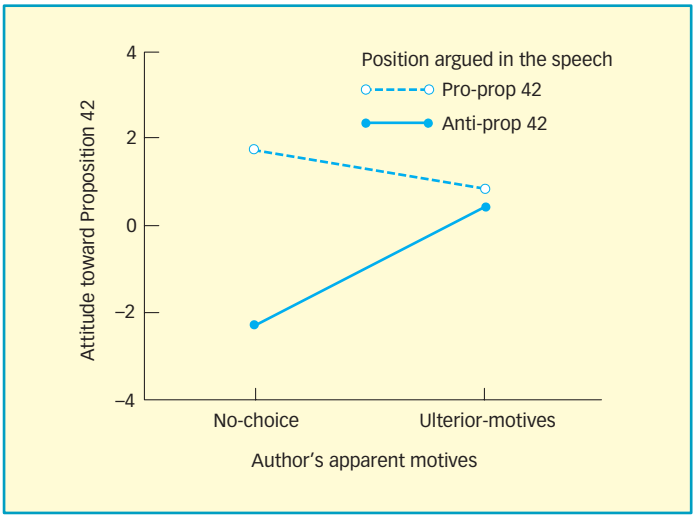
One of the best-known errors or biases in social cognition is the **fundamental attribution error**. It involves exaggerating the influence of dispositions [personality] as causes of behavior while minimizing the role of situational factors. For example, suppose you meet someone for the first time and find them rather irritable and rude. You may well conclude they have an unpleasant personality, ignoring the possibility they have a headache or are troubled by problems.

Why do we possess the fundamental attribution error? Most of us like to think that life is fair. An emphasis on dispositional factors is consistent with the notion that, "We get what we work for, get what we ask for, and get what we deserve" (Gilbert, 1995, p. 108). The fundamental attribution error also makes our lives seem predictable. If the behavior of others is determined by their personalities, this makes their future behavior more predictable than if it varies considerably from situation to situation. We can also consider the fundamental attribution error (and other biases) in the context of evolutionary psychology (see Chapter 1). According to terror management theory (Haselton & Nettle, 2006), it makes good evolutionary sense for humans to be biased in ways that avoid costly errors. For example, suppose we assume that someone who is aggressive in one situation is likely to be aggressive in other situations because of his/her personality. This may be incorrect, but it ensures that we are on our guard when we next meet that person.

We might expect the fundamental attribution error to be common in individualistic cultures in which the emphasis is on individual responsibility and independence (see Chapter 1). However, many cultures are collectivistic (e.g., Asian cultures) and have an emphasis on group cohesiveness rather than on individual needs. Such cultures focus on situational explanations of people's behavior because their members have to be responsive to the wishes of others. Accordingly, there should be little evidence of the fundamental attribution error in collectivistic cultures.

Key Term

Fundamental attribution error: exaggerating the importance of personality and minimizing the role of the situation in determining another person's behavior.



Participants' assessment of Rob's true attitudes towards Proposition 42 (making students not fulfilling certain academic requirements ineligible for athletic scholarships) as a function of condition (no-choice = Rob assigned a point of view; ulterior-motives = Rob might want to please his professor) and position argued for in the speech. From Fein et al. (1990). Copyright © American Psychological Association. Reprinted with permission.

Findings

Choi and Nisbett (1998) asked American and Korean participants to read an essay supporting or opposing capital punishment. They were informed the essay writer had been told which side of the issue to support. The American participants showed a much stronger fundamental attribution error (i.e., arguing that the essay writer was expressing his/her true attitudes) than the Korean ones.

Most studies in Western cultures have obtained evidence of the fundamental attribution error (e.g., Jones & Harris, 1967). However, Fein, Hilton, and Miller (1990) argued that American students would be less likely to underestimate situational factors if the other person had strong reasons for suppressing his/her true attitudes. Participants read an essay by "Rob Taylor." Some participants were told Rob had been assigned to write in favor of (or against) a particular point of view. Other participants were told the professor who would be evaluating Rob had very strong views on the topic, and that Rob's essay expressed the same views as those of his professor.

Participants who thought Rob had been assigned a point of view made the fundamental attribution error, deciding Rob's true attitudes were those expressed in the essay (see the figure above). In contrast, participants believing Rob had a good reason for hiding his true attitudes (i.e., pleasing his professor) decided the essay didn't reflect his true attitudes. Thus, we don't make the fundamental attribution error when people have a hidden motive for their behavior. For example, we expect politicians to express agreement with the views of their party purely for situational reasons (e.g., to gain advancement).

Evaluation

- (+) People (especially in Western cultures) often exaggerate the importance of dispositions and minimize that of situations as causes of behavior.
- (−) The fundamental attribution error is much weaker in collectivistic cultures than in individualistic ones.
- (−) The fundamental attribution error is less important in everyday life than in the laboratory. In everyday life, we realize that many people (e.g., politicians; car salespeople) have hidden motives influencing their behavior.

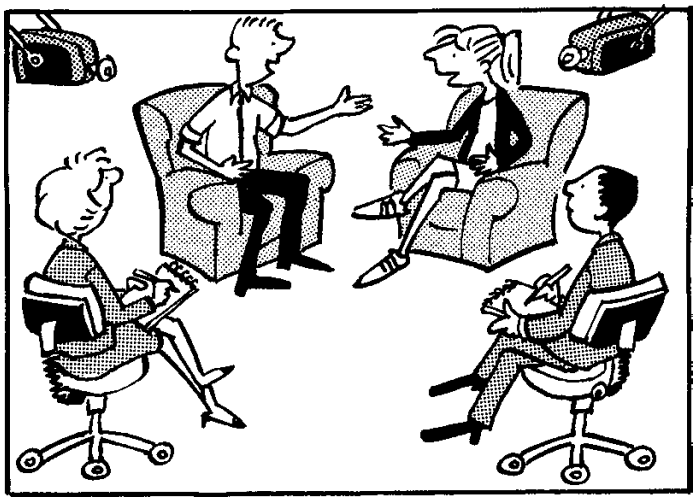
Actor–observer effect

Suppose a mother is discussing with her son why he has done poorly in an examination. The son may argue that the questions were unusually hard, that the marking was unfair, and so on. However, his mother may focus on the child's laziness and lack of motivation. Thus, the son sees his own behavior as being determined by external or situational factors, whereas his mother focuses on her son's internal or dispositional factors.

Jones and Nisbett (1972) argued that the processes involved in the above example operate in numerous situations. According to them, "There is a pervasive tendency for actors to attribute their actions to situational requirements, whereas observers tend to attribute the same actions to stable personal dispositions" (Jones & Nisbett, 1972, p. 80).

Findings

Choi and Nisbett (1998) studied cultural differences in the actor–observer effect. American and Korean participants read an essay having been told the writer had been

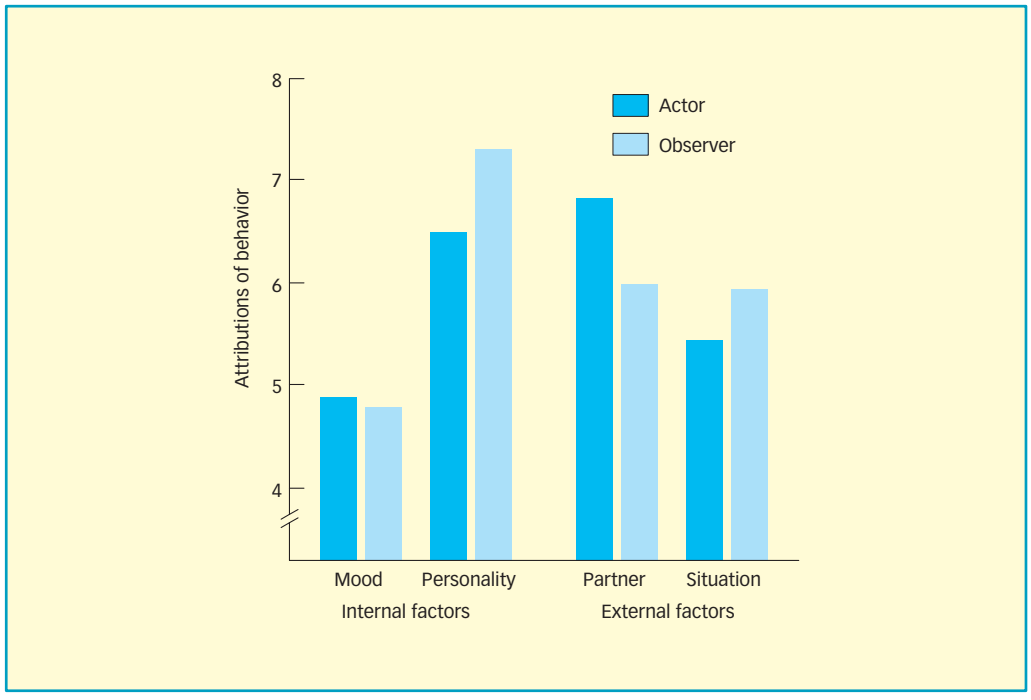


exposed to situational pressure to argue for the position expressed in the essay. Participants then carried out two tasks: (1) they rated the extent to which the essay writer expressed his/her genuine attitudes; and (2) they wrote an essay under the same conditions as the essay writer and then rated the extent to which they themselves had expressed their genuine attitudes. American participants showed the actor–observer effect, arguing that the essay writer expressed his/her true attitudes more than they had themselves. In contrast, the Korean participants argued that the essay writer was no more likely than themselves to be expressing his/her true attitudes.

Storms (1973) argued that we exaggerate the situation's importance in determining our own behavior because we can see the situation (e.g., other people) but not ourselves. Conversations were videoed from the actor's point of view and from the observer's point of view. When actors viewed the video taken from the observer's point of view (so they could see themselves), they generally attributed their own behavior to dispositional rather than situational factors. Thus, our attributions are unduly influenced by information that is the focus of attention.

Robins, Spranca, and Mendelsohn (1996) argued that the actor–observer effect is expressed too vaguely. Various internal and external factors might influence attributions, and we need to identify the *specific* factors involved. Pairs of students interacted, and then rated the importance of two internal factors (personality; mood) and two external factors (partner; situation) in influencing their behavior and that of their partner.

There was support for the actor–observer effect for one internal factor (personality) and for one external factor (partner) (see the figure below). However, there was *no* support for this effect for the other internal factor (mood), and the findings were opposite to prediction for the other external factor (situation). Why were actors' attributions strongly influenced by one external factor (partner) but not by another (situation)? Presumably the actors' focus of attention was more on their partner than on more general aspects of the situation.



Data from Robins, Spranca, and Mendelsohn (1996).

Evaluation

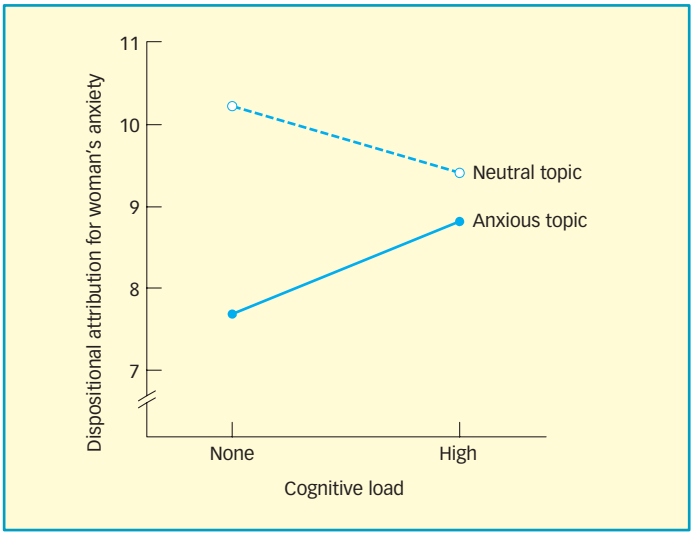
- (+) The actor–observer effect has been obtained in several situations.
- (+) The effect explains some misunderstandings between people. For example, students may attribute their poor marks to bad luck whereas their parents attribute those marks to poor motivation.
- (−) The actor–observer effect is weaker in collectivistic cultures than in individualistic ones.
- (−) "The assertion that observers attribute their behavior to internal factors whereas actors attribute their behavior to external factors is not meaningful without specifying which internal factors and which external factors" (Robins et al., 1996, p. 385).

INTEGRATION MODEL

Various attempts have been made to develop theoretical models specifying the mechanisms underlying attributions of other people's behavior. In this section, we focus on the integration model put forward by Trope and Gaunt (2000). It assumes there are two successive stages:

1. *Behavior identification*: The observer uses a mixture of dispositional and situational information to provide a description of the actor's behavior (e.g., "Fred behaved anxiously"). This description is influenced most by salient or conspicuous information.
2. *Diagnostic evaluation*: The observer uses the identified behavior from stage 1 to consider whether to favor the dispositional hypothesis or the situational hypothesis (e.g., "Fred was placed in a very stressful situation"). Thus, the observer integrates the available information to decide the causes of the actor's behavior.

According to this model, the first stage is carried out relatively automatically, whereas the second stage is more effortful and demanding. Observers under cognitive load (i.e., busy doing something else) will make little use of the second stage. As a result, whatever explanation of the actor's behavior (dispositional or situational) is salient or dominant at stage 1 will be favored.



Strength of attribution of a woman's anxious behavior to personality or disposition as a function of the topic she discussed (neutral vs. anxious) and the participant's cognitive load (none vs. high). Data from Gilbert et al. (1988).

Findings

Gilbert, Pelham, and Krull (1988) asked participants to watch a video of a woman behaving anxiously. They couldn't hear what she was saying, but the topics she was supposed to be discussing were included as subtitles in the video. In one condition, the topics were anxiety-provoking (e.g., hidden secrets). In the other condition, the topics were fairly neutral (e.g., world travel). In fact, all participants saw exactly the same video apart from the subtitles (see figure on the left).

Half the participants memorized the list of topics (cognitive load), whereas the other half only watched the video. Afterwards participants indicated the extent to which the woman's anxiety was a result of her disposition. The information that was most salient was the woman's anxious behavior. It follows from the model that participants under cognitive load should have

focused mainly on her behavior and so provided dispositional attributions regardless of the topics discussed. That is what was found. Participants not under cognitive load were able to process information about the topics discussed and so gave stronger dispositional attributions when the woman talked about neutral topics.

According to the integration model, situational attributions should be given when two factors are present: (1) situational information is salient or conspicuous; and (2) participants experience cognitive load and so don't use stage 2. This prediction was confirmed by Trope and Gaunt (2000). Participants read an essay allegedly written by someone instructed to favor the legalization of marijuana. The situational pressure was made salient by presenting the instructions for the essay in an audio recording. As predicted, participants under cognitive load (holding digits in memory) took considerable account of situational factors when deciding whether the essay writer was expressing his/her genuine attitudes.

Evaluation

- (+) Our attributions of others' behavior are influenced by automatic and by effortful processes.
- (+) Attributions of others' behavior are often different when we engage in effortful cognitive processing than when we don't.
- (−) The distinction between automatic and effortful processes is oversimplified because processes vary in how effortful they are.
- (−) More research is needed to identify more precisely the processes underlying our explanations of others' behavior.
- (−) Individual differences are generally ignored. For example, relatively well-off people tend to attribute poverty in others to laziness, whereas poorer people attribute poverty in others to problems within society (Furnham, 1982).

THE SELF

Baumeister (1998) argued that one of the key characteristics of the self is its unity or oneness (i.e., we perceive ourselves as having a single self). He identified three other key aspects of the self-concept:

1. We have reflexive consciousness, meaning that we are consciously aware of having a self.
2. The self exists almost entirely within a social context, and is used when relating to others.
3. The self seems to make decisions and to cause us to behave in certain ways.

Cross and Madson (1997, p. 5) argued that there are important gender differences in the self-concept: "Men in the United States are thought to construct and maintain an independent self-construal, whereas women are thought to construct and maintain an interdependent self-construal." There is much evidence to support this viewpoint. Clancy and Dollinger (1993) asked men and women to put together sets of pictures that described themselves. Most of the pictures chosen by women showed them with others (e.g., family members). In contrast, most of the pictures chosen by men showed them on their own. In other studies reviewed by Cross and Madson, men were found to evaluate themselves more positively with respect to independence (e.g., power; self-sufficiency) than interdependence (e.g., sociability; likability). The opposite pattern has been found with women.

SOCIAL IDENTITY THEORY

Social identity theory (e.g., Turner et al., 1987; see Chapter 20) is an important approach to the self-concept. Of crucial importance within the theory is the distinction between personal identity and social identity, both of which help to define our sense of self. **Personal identity** is based on our personal relationships and characteristics, and includes ways in which we differ from other people (e.g., in personality). In contrast, **social identity** is based on our membership of various groups (e.g., student; woman; European). Most theoretical approaches to the self have focused almost exclusively on personal identity, and have ignored the notion that the self is strongly influenced by various social identities.

We possess numerous personal and social identities. According to Hogg and Vaughan (2005, p. 127), "We have as many social identities as there are groups that we feel we belong to, and as many personal identities as there are interpersonal relationships we are involved in and clusters of idiosyncratic attributes that we believe we possess." The identity dominant at any given time often depends on the match between the current situation and our various personal and social identities. For example, if I attend a psychology conference, my identity as a psychologist is likely to be dominant.

Turner (1999) discussed two other factors influencing the identity we adopt. First, there are our past experiences. For example, if it has made me happy to identify myself as a psychologist in the past, then that increases the likelihood that I will do so across a range of situations. Second, there are present expectations. If I expect the people I am interacting with will be more positively disposed toward a writer than a psychologist, then I may be tempted to adopt the identity of a writer rather than a psychologist!

What is the relationship between personal and social identity? When we find ourselves in a situation emphasizing our shared social identity with others, we tend to adopt a social identity rather than a personal one. For example, women who go out in a group may adopt the social identity of a woman. If so, they focus on ways in which they are similar to other women and de-emphasize the ways they differ from most other women. Thus, increased social identity is often accompanied by a decrease in personal identity.

Key Terms

Personal identity:
those aspects of the **self-concept** that depend on our personal relationships and characteristics.

Social identity:
the part of the **self-concept** depending on the various groups to which we belong.

Case Study: *Football Supporters*

At the 1998 soccer world cup finals in France many English supporters became involved in major antisocial incidents, while Scottish supporters were mainly nonviolent. The media focused on "hooligans" as the source of the disruption, and the absence of "hooligans" as the cause of nonviolence. However, an ethnographic study (Stott, Hutchison, & Drury, 2001) of these supporters showed these two supporter crowds had their own social identities. The England crowd redefined their identity so that even normally nonviolent members came to believe that violence toward their rivals, the outgroup, was legitimate, a belief reinforced by the difference this made between themselves, the ingroup, and the nonviolent outgroup. Similarly, the Scotland supporters, a nonviolent crowd, used the same social identity model in establishing their own nonviolent identity as the ingroup, being clearly different from their outgroup who were using violence. In this way social identity theory can explain both the presence and the absence of antisocial crowd behavior, a view which challenges the simplistic "hooligan" approach.

Findings

Since most of the research discussed later in the chapter is on personal identity, we focus here on social identity. If someone's commitment to a group (and relevant social identity) is sufficiently strong, they are likely to accept very negative consequences from continued group involvement. For example, Baltesen (2000) discussed the employees of Baan, an IT company in the Netherlands. They all belonged to a very religious community, and so there was a strong sense of social identity among them. As a result, they remained in the company even when it encountered severe financial problems. Their reaction to these problems was to introduce daily prayers in the hope the company might survive.

A central assumption of social identity theory is that group members like their group to be distinct from other groups in positive ways (e.g., more successful; more dynamic). However, it is sometimes difficult for a group to be both distinctive *and* perceived positively. In such cases, we might expect that the need for a distinctive social identity based on group membership would be

even more important than the group being perceived positively. For example, Poland has been invaded several times in its history, and so Polish people should have a strong sense of national identity. As predicted, Polish students accepted they possessed various negative characteristics (e.g., excessive drinking; quarrelsome; vulgar) associated with being Polish to maintain their national social identity (Mlicki & Ellemers, 1996).

What causes a *change* in social identity? Drury and Reicher (2000) argued that a key factor is a discrepancy between ingroup and outgroup views of one's group. For example, many of those involved in a long-running campaign in the UK against the building of the M11 motorway link road in north-east London regarded themselves initially as citizens having a neutral relationship with the police. However, the discovery that the police regarded them as irresponsible caused many of them to change their social identify and become more radical. As one female campaigner expressed it, "I've got very determined just lately, determined to get on with things, and I don't ever think that I'm going to lead an ordinary life again" (Drury & Reicher, 2000, p. 594)

Evaluation

- \+ Our sense of self is *flexible*, with the identity dominant at any given time being determined in part by the current situation.
- \+ The distinction between personal identity and social identity is important.
- \+ Previous theories mostly ignored social identity, which is of great importance to the sense of self.
- − It is difficult to assess precisely which personal and social identities are possessed by any given individual
- − We often cannot predict which identity will be dominant in any given situation because so many factors are involved.
- − "It is [not] clear how we should conceive of the social self, which can be as varied as the groups to which we belong" (Ellemers, Spears, & Doosje, 2002, p. 164).

Self-esteem

An important part of the self-concept is **self-esteem**. This is the evaluative aspect of the self-concept, and concerns how worthwhile and confident an individual feels about himself/herself. Several theorists (e.g., Baumeister, 1995; Tesser, 1988) have argued that most people are highly motivated to maintain or enhance their self-esteem, and that much social behavior serves the goal of maximizing self-esteem. However, other

A reservoir of self-esteem?

It has been suggested that self-esteem can act as a defense mechanism. For example, when an individual is in a situation where they are unsure of their identity, their self-esteem, based on previous successful experiences, protects the self while the uncertainty is being resolved. But in doing so the self-esteem is used up. Self-esteem can be replenished in more successful social situations where self-verification is not an issue. This suggests that persistent low self-esteem could be the result of the person being in several situations where self-verification is difficult or not possible (Cast & Burke, 2002).

Key Term

Self-esteem: the evaluative part of the **self-concept** concerned with feelings of confidence and being worthwhile.

It has been found that whereas American students overestimate their own academic performance but not that of their close friends, Japanese students overestimate their own performance but they overestimate the performance of their friends even more, suggesting that collectivistic students are motivated to enhance others more than themselves.

theorists (e.g., Swann, 1987) have argued that people are motivated more to maintain *consistent beliefs* about themselves. According to this self-consistency theory, people like to feel they understand themselves. If they allow positive information about themselves to boost their self-esteem, they would have the disturbing task of changing their self-concept. As a result, people maintain consistent beliefs about themselves, even when some of those beliefs are negative.

Findings

If people are motivated to enhance their self-esteem, they should take credit for success by attributing it to internal or dispositional factors (e.g., "I worked very hard"; "I have a lot of ability"). In contrast, they should deny responsibility for failure by attributing it to external or situational factors (e.g., "The task was very hard"; "I didn't have enough time"). Tendencies to take credit for success but to accept no blame for failure define the **self-serving bias**.

Several studies have reported evidence of the self-serving bias. Bernstein, Stephan, and Davis (1979) considered students who had obtained a good or a poor grade on an exam. Those with good grades typically attributed it to their intelligence, their hard work, or both. In contrast, those receiving poor grades attributed it to bad luck or an unreasonable lecturer. Campbell and Sedikides (1999) carried out a meta-analysis of studies on self-serving bias. In line with the bias, success was consistently attributed to internal factors. However, failure was sometimes attributed to internal factors and sometimes to external factors.

Why are attributions for failure so inconsistent? Duval and Silvia (2002) persuaded self-focused participants that failure could or could not be followed by improvement. Failure was attributed internally when subsequent improvement was likely, but it was attributed externally when subsequent improvement was improbable.

The self-serving bias is stronger in individualistic cultures than in collectivistic ones (see Smith & Bond, 1998, for a review). For example, Kashima and Triandis (1986) asked American and Japanese students to remember detailed information about landscapes shown on slides. Both groups tended to explain their success in terms of situational factors (e.g., luck) and their failures in terms of task difficulty. However, the Americans were more inclined to explain their successes in terms of high ability than their failures in terms of low ability, whereas the Japanese showed the opposite pattern.

The emphasis on enhancing self-esteem can also be seen in the **false uniqueness bias**, which is the tendency to regard oneself as better than most other people. This bias has been found consistently in North Americans (e.g., Campbell, 1986). However, Japanese people don't show the false uniqueness bias, even when rating themselves on attributes regarded as central to success in Japanese culture (see Heine, Lehman, Markus, & Kitayama, 1999).

Is high self-esteem important? It may seem obvious that high self-esteem is desirable, and individuals with high self-esteem experience more pleasant mood states than those with low self-esteem (Campbell, Chew, & Scratchley,

Key Terms

Self-serving bias:
the tendency to take credit for success but to refuse to accept blame for failure.

False uniqueness bias:
the mistaken tendency to think of oneself as being better than most other people.

1991). However, high self-esteem can have negative consequences. Colvin, Block, and Funder (1995) identified individuals whose opinions about themselves were significantly more favorable than those of their friends. When studied in the laboratory, these individuals interrupted other people, they expressed hostility, they were socially awkward, and they made others feel irritable. In other words, individuals with inflated self-esteem are arrogant and self-centered.

Heine et al. (1999) argued that striving for high self-esteem (or the closely related high self-confidence) is much less common in collectivistic cultures than in individualistic ones. They argued that in Japanese culture, "To say that an individual is self-confident gets in the way of interdependence, or it reveals one's failure to recognize higher standards of excellence and thus to continue to self-improve, or both" (Heine et al., 1999, p. 785). In support of their theory, Heine et al. discussed unpublished research in which European Canadian and Japanese students ranked 20 traits in terms of how much they would ideally like to possess them. European Canadians rated self-confidence as the trait they would *most* like to possess, whereas the Japanese rated it as the trait they would *least* like to possess.

In sum, there are major cultural differences in the importance attached to high self-esteem. As Heine et al. (1999, p. 785) concluded:

> *Conventional theories of self-esteem are based on a North American individualized view of self that is motivated to achieve high self-esteem. In contrast, the most characteristic view of self in Japan (and elsewhere) is different from its North American counterpart . . . It is maintaining a self-critical outlook that is crucial to developing a worthy and culturally appropriate self in Japan.*

Evaluation

- (+) Important biases (e.g., the self-serving and false uniqueness biases) used in Western cultures to enhance self-esteem have been identified.
- (+) Clear cross-cultural differences in the existence of biases designed to bolster self-esteem and in the importance attached to high self-esteem have been found.
- (−) There is controversy concerning the desirability of high self-esteem within Western cultures.
- (−) Most studies on self-esteem rely on self-report measures that may be distorted and that only take account of information of which the individual has conscious awareness.

Chapter Summary

Attitudes

- Assessing attitudes by self-report questionnaires can be problematical because of social desirability bias. Two ways of minimizing this problem are to use the bogus pipeline or to assess implicit attitudes.
- Attitudes fulfill knowledge, utilitarian, and social identity functions, and help to maintain self-esteem.
- Attitudes often predict behavior only weakly. According to the theory of planned behavior an individual's behavior is also determined by subjective norms, his/her behavior intention, behavioral beliefs, outcome evaluations, and perceived behavioral control.

- Some of the influence of past behavior on current behavior can't be accounted for by the theory of planned behavior. The theory focuses on very specific attitudes, namely attitudes towards behavior.

Attitude change and persuasion

- Persuasion depends on five factors: source; message; channel; recipient; and target behavior.
- According to the elaboration likelihood model, attitude change depends on either a central route involving much attention or a peripheral route requiring minimal use of resources. In similar fashion, the heuristic-systematic model distinguishes between systematic and heuristic processing of messages.
- Many of the findings on attitude change can be accounted for by the notion that messages can be processed by two systems varying in their attentional demands. However, it is more realistic to assume that there are several forms of processing varying in the amount of effortful message evaluation involved.
- According to Festinger, cognitive dissonance motivates people to reduce dissonance by changing one or both of their inconsistent cognitions. He also argued that behavior sometimes influences attitudes. The need for cognitive consistency is weaker in collectivistic cultures than in individualistic ones.

Attribution theories

- According to Heider, we explain other people's behavior in terms of internal (dispositional) or external (situational) attributions.
- According to Kelley, we use information about consensus, consistency, and distinctiveness when making attributions. It is not clear that this is what happens in real life.
- The fundamental attribution error is much stronger in individualistic cultures than in collectivistic ones. It is not found when we suspect the other person has a hidden motive influencing his/her behavior.
- The actor–observer effect is also much stronger in individualistic cultures. The actual effects observed even in individualistic cultures are more complex than would be expected by advocates of the actor–observer effect.
- According to Trope and Gaunt's integration model, there are successive stages of behavior identification and diagnostic evaluation when making attributions. The second stage requires much more effort than the first one and is omitted if necessary.

The self

- Men in Western cultures tend to regard themselves as independent rather than as interdependent, whereas women show the opposite pattern.
- According to social identity theory, we possess several personal and social identities.
- According to social identity theory, we want any group to which we belong to be distinctive and to be perceived positively. Changes in social identity occur when there is a discrepancy between ingroup and outgroup views of one's group.
- Most people in individualistic Western cultures are motivated to enhance their self-esteem. Evidence for this can be seen in the self-serving and false uniqueness biases.
- In collectivist cultures, there is much less striving for high self-esteem than in individualistic ones. There is also much less evidence for the self-serving and false uniqueness biases.

Further Reading

- Augoustinos, M., Walker, I., & Donaghue, N. (2006). *Social cognition: An integrated introduction* (2nd ed.). London: Sage. This textbook provides detailed and up-to-date coverage of the entire field of social cognition.
- Hewstone, M., & Stroebe, W. (2001). *Introduction to social psychology* (3rd ed.). Chapters 5, 7, and 8 provide informative accounts of several of the main topics in social cognition.
- Hogg, M.A., & Vaughan, G.M. (2005). *Social psychology* (4th ed.). Harlow, UK: Prentice Hall. Chapters 2 through 4 of this excellent textbook provide detailed and informative coverage of the topics discussed in this chapter.

Chapter 18

Contents

18 Social behavior and relationships

In this chapter we focus on the main ways we respond to (and interact with) other people. One important example is prosocial behavior. This involves behaving positively towards others, doing our best to help them even at some cost to ourselves. Aggressive or antisocial behavior is much more negative—it involves deliberately trying to hurt someone else.

It might seem as if prosocial and antisocial or aggressive behavior are simply opposite extremes of a single dimension, but this is *not* the case. In fact, prosocial and antisocial or aggressive behavior are largely independent of each other (Krueger, Hicks, & McGue, 2001). Thus, there is no general tendency for individuals high in prosocial behavior to be low in aggressive behavior, or vice versa.

This chapter is also concerned with interpersonal relationships, which are a vital part of all our lives. We consider the factors determining whether we are initially attracted to another person, the factors maintaining a friendship or other relationship, and the factors leading to its break-up. As we will see, some aspects of interpersonal relationships (especially marriage) differ considerably from one culture to another.

PROSOCIAL BEHAVIOR

This section of the chapter is concerned with prosocial behavior, which is discussed from the developmental perspective in Chapter 15. **Prosocial behavior** resembles helping behavior, but they are not the same: "The definition of 'prosocial behavior' is narrower [than that of helping behavior] in that the action is intended to improve the situation of the help-recipient, the actor is not motivated by the fulfillment of professional obligations, and the recipient is a person and not an organization" (Bierhoff, 2001, p. 286).

Many clear examples of prosocial behavior involve altruism. **Altruism** is voluntary helping behavior that is costly to the individual who is altruistic, and typically involves empathy. According to Hogg and Vaughan (2005, p. 649), empathy is "the ability to feel another person's experiences; identifying with and experiencing another person's emotions, thoughts, and attitudes."

WHAT EXPLAINS ALTRUISM?

We can obtain some understanding of why altruism exists from the perspective of evolutionary psychology. Advocates of evolutionary psychology (an approach based on the assumption that much human behavior can be explained in evolutionary terms; see Chapter 2) claim that individuals are highly motivated to ensure their genes survive. How does this explain altruism? As Gross (1996, p. 413) pointed out, "If a mother dies in the course of saving her three offspring from a predator, she will have saved a $\frac{1}{2}$ times her own genes (since each offspring inherits one half of its mother's genes). So, in terms of genes, an act of apparent altruism can turn out to be extremely selfish."

Key Terms

Prosocial behavior: cooperative, affectionate, or helpful behavior designed to benefit another person.

Altruism: a form of **prosocial behavior** that is costly to the individual and is motivated by the desire to help the other person.

Parents invest a lot of time and resources in their children, which may be explained by biological theories of relationships—the parents' chances of passing on their genes are improved if they can help their children to survive and succeed.

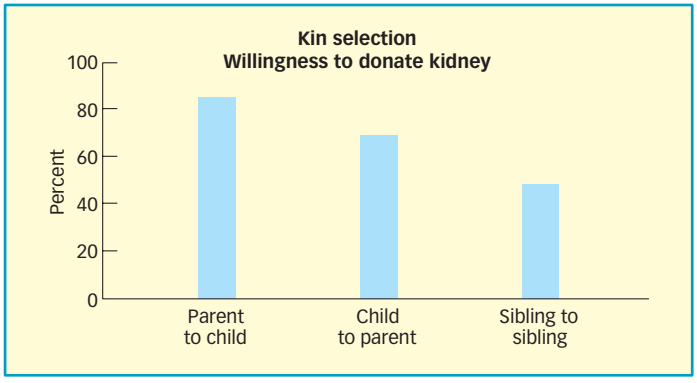
Evolutionary psychology helps to explain why people often behave altruistically toward members of their own family. However, most people also behave altruistically toward nonrelatives. Evolutionary psychologists (e.g., Trivers, 1971) have explained this in terms of reciprocal altruism. **Reciprocal altruism** is summed up in the expression, "I'll scratch your back if you scratch mine." Thus, altruistic behavior may occur because the individual behaving altruistically toward someone else expects that person to return the favor. According to Trivers, reciprocal altruism is most likely to be found under certain conditions:

1. The costs of helping are fairly low and the benefits are high.
2. We can identify those who cheat by receiving help but not helping in return.

Fehr and Fischbacher (2003, p. 785) pointed out that reciprocal altruism and cooperation are much more common in humans than in other species: "Most animal species exhibit little division of labor and cooperation is limited to small groups. Even in other primate societies, cooperation [and reciprocal altruism] is orders of magnitude less developed than it is among humans." It is not altogether obvious from the perspective of evolutionary psychology why there should be this substantial difference between the human and other species.

Findings

Burnstein, Crandall, and Kitayama (1994) asked participants to choose between helping various individuals differing in genetic relatedness or kinship. Choices were strongly influenced by kinship, especially for life-and-death situations. Fellner and Marshall (1981) found that 86% of people were willing to be a kidney donor for their children, 67% would do the same for their parents, and 50% would be a kidney donor for their siblings (see the figure on the left).



Korchmaros and Kenny (2001) argued that we should distinguish between genetic relatedness and emotional closeness. College students chose which family member they would be most likely to provide with life-saving assistance. Altruistic behavior was determined partly by genetic relatedness (predicted by evolutionary psychology) and partly by emotional closeness (not predicted by evolutionary psychology).

Fijneman, Willemsen, and Pooringa (1996) found that individuals in collectivistic cultures (with an emphasis on group membership) gave more help to other people than was the case with individuals in individualistic cultures (with an emphasis on individual responsibility). On the face of it, these cultural differences seem to indicate that reciprocal altruism doesn't apply in individualistic cultures. However, those living in individualistic cultures expected less help from others than did those living in collectivistic cultures. As a result, there was reciprocal altruism in most cultures, with individuals typically giving as much help as they expected to receive in return.

Reciprocal altruism is only an effective strategy when we can identify those who cheat by receiving help without offering any help themselves. It is easier to do this in small communities than in large ones. Steblay (1987) carried out a meta-analysis. He concluded that individuals living in large cities are less willing to pass on a telephone message, less helpful to a lost child, less willing to do small favors, and less likely to post letters that have gone astray.

Key Term

Reciprocal altruism: the notion that individuals will behave altruistically towards someone else if they anticipate that person will respond altruistically.

Why do many individuals behave altruistically even when those they help are very unlikely to reciprocate? According to Fehr and Fischbacher (2003), the answer is that it allows those individuals to gain a reputation for behaving altruistically that will increase the likelihood that they will be assisted by others in the future. They discussed a study in which participants decided whether to help another person who was not in a position to reciprocate that help. The crucial manipulation was whether participants' behavior would allow them to gain a reputation for altruism. Of those who could gain a reputation, 74% provided help, compared to only 37% of those who could not. Thus, many people are willing to behave altruistically in order to gain a general reputation for altruism.

Reluctance to show reciprocal altruism when it isn't possible to detect cheaters in advance was found in a series called *Shafted* seen briefly on British television. At the end of each show, both contestants indicated privately whether they wanted to share the money that had accumulated during the show or have it all for themselves. If they both voted to share the money, they received 50% each. If one person decided they wanted all the money and the other voted to share it, the former person received all the money. Finally, if they both voted to have all the money, no one received anything. In the final show, the money at stake was £220,000 (about $440, 000). Both players voted to have all the money because they couldn't trust the other player to be altruistic. It was cruel to observe the looks on their faces when they realised that neither of them would receive anything. Indeed, it was so cruel that the series ended prematurely after that show.

Evaluation

- (+) Evolutionary psychologists have put forward persuasive reasons for the existence of altruistic behavior toward relatives and nonrelatives.
- (+) The evolutionary approach explains why altruistic behavior is much more likely to be shown to close relatives than to nonrelatives.
- (+) Evolutionary psychologists focus more than other psychologists on the important issue of *why* altruism is so important to the human species.
- (−) Evolutionary psychology provides only a partial explanation of altruistic behavior towards strangers.
- (−) The evolutionary approach ignores several factors (e.g., emotional closeness; the individual's personality) that help to determine the precise circumstances in which altruistic behavior is found.

BYSTANDER INTERVENTION

A haunting image of our time is of someone being attacked violently in the middle of a city with no one coming to their assistance. This reluctance to help was shown in the case of Kitty Genovese, who was stabbed to death in New York as she returned home at 3 o'clock in the morning on March 13, 1964. According to the *New York Times*, 38 witnesses watched Kitty Genovese being attacked three times over a 30-minute period. No one intervened and only one person called the police. This suggests a truly horrifying reluctance of people to help victims in desperate need of assistance.

Many textbook writers (including me, alas!) have assumed that the details of what happened to Kitty Genovese reported by the *New York Times* were accurate. In fact, the newspaper greatly exaggerated what had happened. For example, it is highly probable that only three people saw either of the stabbings (there were two not three). Even those three eyewitnesses would have seen Kitty being attacked for only a few seconds.

Case Study: *The Kitty Genovese Murder* (as misleadingly reported by the *New York Times*)

At approximately 3.20 in the morning on March 13, 1964, 28-year-old Kitty Genovese was returning to her home in a middle-class area of Queens, New York, from her job as a bar manager. She parked her car and started to walk to her second-floor apartment some 30 meters away. She got as far as a streetlight, when a man who was later identified as Winston Mosely grabbed her. She screamed. Lights went on in the nearby apartment building. Kitty yelled, "Oh my God, he stabbed me! Please help me!" A window opened in the apartment building and a man's voice shouted, "Let that girl alone!" Mosely looked up, shrugged, and walked off down the street. As Kitty Genovese struggled to get to her feet, the lights went off in the apartments. The attacker came back some minutes later and renewed the assault by stabbing her again. She again cried out, "I'm dying! I'm dying!" Once again the lights came on and windows opened in many of the nearby apartments. The assailant again left, got into his car and drove away. Kitty staggered to her feet as a city bus drove by. It was now 3.35 a.m. Mosely returned and found his victim in a doorway at the foot of the stairs. He then raped her and stabbed her for a third time—this time fatally. It was 3.50 when the police received the first call. They responded quickly and were at the scene within 2 minutes, but Kitty Genovese was already dead.

The only person to call the police, a neighbor of Ms. Genovese, revealed that he had phoned only after much thought and after making a call to a friend to ask advice. He said, "I didn't want to get involved." Later it emerged that there were 38 other witnesses to the events over the half-hour period. Many of Kitty's neighbors heard her screams and watched from the windows, but no one came to her aid. The story shocked America and made front-page news across the country. The question people asked was why no one had offered any help, or even called the police earlier when it might have helped. Urban and moral decay, apathy, and indifference were some of the many explanations offered. Two social psychologists, Bibb Latané and John Darley, were unsatisfied with these explanations and began a series of research studies to identify the situational factors that influence whether or not people come to the aid of others. They concluded that an individual is less likely to provide assistance the greater the number of other bystanders present.

Two psychologists (John Darley and Bibb Latané) read the article in the *New York Times*. They wondered why Kitty Genovese wasn't helped by any of the (allegedly) numerous eyewitnesses who saw her being attacked. They argued that a victim might be better placed when there was just one bystander rather than many. In such a situation, responsibility for helping the victim falls firmly on one person rather than being spread among many people. Thus, the witness or bystander has a sense of personal responsibility. If there are many observers of a crime, there is a **diffusion of responsibility**, with each person bearing only a small portion of the blame for not helping. Thus, there is less feeling of personal responsibility.

We also need to consider culturally determined expectations of behavior (known as social norms). According to the norm of social responsibility, we should help those who need help. Darley and Latané (1968) argued that this norm is more strongly activated when only one person observes a victim's fate than when there are several bystanders.

Bystander apathy in the internet age

Researchers in Israel (Barron & Yechiam, 2002) hypothesized that people would respond to a query much better if they thought they were being targeted as an individual, rather than as a set of people. They created an imaginary person, Sarah, on Yahoo who was enquiring about possible courses at a technical institute. Some of Sarah's emails were sent to individuals, and some to groups of five people.

The results showed that 50% of the sample did not reply at all if there were four others on the address list, but only 36% of the single recipients failed to reply. And almost 33% of single recipients sent back a very helpful response—with additional useful information—compared to 16% of the group sample.

This suggests that automatic emails to groups of people are not as successful in outcome as individual ones. This should hold true whether one is asking for a volunteer to help with an office birthday cake or a commercial advertiser trying to increase hits on a website. So the implication is that to be truly effective people need to be contacted singly. If they see they are part of a group they may feel that someone else will respond as required so they need not do anything. They will become virtual bystanders!

Key Term

Diffusion of responsibility: the reduction in a sense of responsibility as the number of observers of an incident increases.

Findings

In their classic study, Darley and Latané (1968) put participants in separate rooms, and told them to put on headphones. They were instructed to discuss their personal problems, speaking into a microphone, and hearing others' contributions over their headphones. They were led to believe there were up six people involved in the discussion, but all of the apparent contributions by other participants were only tape recordings.

Each participant was told that one of the other participants was prone to seizures. After a while they heard him say:

> *I—er—I—uh—I've got one of these-er-seizure—er-er—things coming on and—and—and I could really—er—use some help so if somebody would—er—er—help—er—er—help—er—uh—uh—uh [choking sounds] . . . I'm gonna die—er—er—I'm . . . gonna die—er-help—er—er—seizure—er . . . [choking sounds, silence].*

Of those who thought they were the only person to know that someone was having an epileptic fit, 100% left the room and reported the emergency. However, only 62% of participants responded if they thought there were five other bystanders. Of those participants believing they were the only bystander, 50% responded within 45 seconds of the onset of the fit versus 0% of those thinking there were five other bystanders.

There were two other interesting findings. First, participants who thought there were five other bystanders denied this had influenced their behavior. Second, participants not reporting the emergency were not indifferent. Most of them had trembling hands and sweating palms, and they seemed more emotionally aroused than those reporting the emergency.

The chances of bystanders helping a victim depend in part on what the bystanders were doing beforehand. Batson et al. (1978) sent participants from one building to another to perform a task. On the way, they went past a male student slumped on the stairs coughing and groaning. Only 10% of those told their task was important stopped to assist the student compared to 80% told the task was trivial.

What situations produce most helping behavior? The chances of a bystander lending assistance to a victim are much greater if the situation is interpreted as a genuine emergency. Brickman et al. (1982) carried out a study in which participants heard a bookcase falling on another participant followed by a scream. When someone else interpreted the situation as an emergency, participants offered help more rapidly than when the other person said there was nothing to worry about.

The perceived relationship between those directly involved in an incident often has a major influence on bystanders' behavior. Shotland and Straw (1976) staged a fight between a man and a woman. The woman either screamed, "I don't know you" or "I don't know why I ever married you." Far more bystanders intervened when they thought the fight involved strangers rather than a married couple (65% vs. 19%, respectively). Thus, bystanders are reluctant to become involved in the personal lives of strangers.

Who is most likely to offer assistance to a victim? Huston, Ruggiero, Conner, and Geis (1981) argued that bystanders with relevant skills or expertise will be especially likely to provide assistance. They found that those helping in dangerous emergencies generally had relevant skills (e.g., life-saving; first aid; self-defense). Men are more likely than women to help when the situation involves danger or there is an audience (Eagly & Crowley, 1986). Men are more likely to help women than other men, especially when the women are attractive. In contrast, women are equally likely to help men and women. Bystanders are generally more likely to help a victim similar to themselves (Hogg & Vaughan, 2005). Levine (2002) used a situation in which a victim was exposed to physical

Bystanders who have some relevant skill to offer are more likely to get involved than those who don't know what to do.

Late Samaritans

Darley and Batson's (1973) study assessed helping behavior in students from a theological college—where they were studying to be ministers or priests.

The students had to give a presentation at a nearby building—half had to talk about the Bible parable the Good Samaritan; the other half had to talk about the jobs the students enjoyed most. The students were also split up into three groups and were told one of the following:

- You are ahead of schedule and have plenty of time.
- You are right on schedule.
- You are late.

On their way to the talk, they passed a "victim," actually a stooge, who was collapsed in a doorway, coughing and groaning. The students were observed to see whether or not they stopped to help.

Darley and Batson found that the topic of the student's talk did not seem to influence helping. However, the perceived time pressure did. The results were as follows:

Group condition	% helping
Ahead of schedule	63
Right on schedule	45
Late	10

Bizarrely, several "late" condition students who were going to give a talk on the Good Samaritan actually stepped over the victim to get past.

violence. Victims were more likely to be helped when described as belonging to the bystanders' ingroup (a group with which they identified) rather than an outgroup (a group with which they didn't identify).

What characteristics of victims influence whether they receive assistance? Piliavin, Rodin, and Piliavin (1969) staged incidents in the New York subway, with a male victim staggering and collapsing on the floor. He either carried a cane and seemed sober, or he smelled of alcohol and carried a bottle of alcohol. Bystanders were much less likely to help when the victim was "drunk" than when he was "ill." Drunks are regarded as responsible for their own plight and it could be unpleasant to help a smelly drunk who might vomit or become abusive. More generally, we are much inclined to help "deserving" victims than "undeserving" ones.

AROUSAL/COST–REWARD MODEL

Piliavin, Dovidio, Gaertner, and Clark (1981) put forward the arousal/cost–reward model to account for the various findings from bystander intervention studies. According to this model, bystanders go through five steps before deciding whether to assist a victim:

1. Becoming aware of someone's need for help; this depends on attention.
2. Experience of arousal.
3. Interpreting cues and labeling their arousal state.
4. Working out the rewards and costs associated with different actions.
5. Making a decision and acting on it.

The fourth step is the most important. Some of the major rewards and costs involved in helping and not helping are as follows (relevant studies are in brackets):

- *Costs of helping*: Physical harm, delay in carrying out other activities (Piliavin et al., 1969).
- *Costs of not helping*: Ignoring personal responsibility, guilt, criticism from others, ignoring perceived similarity (Darley & Latané, 1969; Levine, 2002).
- *Rewards of helping*: Praise from victim, satisfaction from having been useful if relevant skills are possessed (Huston et al., 1981).
- *Rewards of not helping*: Able to continue with other activities as normal (Batson et al., 1978; Darley & Batson, 1973).

Evaluation

- (+) The model provides a comprehensive account of the factors determining bystanders' behavior.
- (+) Potential rewards and costs associated with helping or not helping influence bystanders' behavior.
- (−) The model implies that bystanders deliberately consider all the elements in the situation. In fact, bystanders often respond impulsively and without deliberation.
- (−) Bystanders don't always need to be aroused before helping a victim. For example, someone with much relevant experience (e.g., a doctor responding to someone having a heart attack) may provide efficient help without becoming very aroused.

AGGRESSION

This section of the chapter focuses on aggression, which is also covered from the developmental perspective in Chapter 15. **Aggression** is:

> *any behavior directed toward another individual that is carried out with the proximate [immediate] intent to cause harm. In addition, the perpetrator must believe that the behavior will harm the target and that the target is motivated to avoid the behavior. (Bushman & Anderson, 2001, p. 274).*

Note that the harm has to be *deliberate*. Someone who slips on the ice and crashes into someone by accident may cause harm, but isn't behaving aggressively. Note also that the victim must want to avoid harm. Whipping a masochist who derives sexual pleasure from the activity doesn't constitute aggressive behavior.

Members of the human race often behave aggressively and violently. There have been about 15,000 wars in the last 5600 years, which works out at almost 2.7 wars per year. However, there are cultural differences in the size of the problems posed by aggression and violence. For example, Brehm, Kassin, and Fein (2005) discussed the murder rate in numerous countries in 1994. The murder rate was almost 80 per 100,000 people in Colombia, it was over 20 in Russia, and it was 9 in the United States. In contrast, it was only about 1 or 2 per 100,000 in the United Kingdom, Egypt, and China.

Bonta (1997) discussed 25 societies in which violent aggression scarcely exists. For example, consider the Chewong people living in the mountains of the Malay Peninsula. Their language doesn't have any words for concepts such as fighting, aggression, or warfare. Bonta found that 23 of the 25 peaceful societies he studied strongly believed in the advantages of cooperation and the disadvantages of competition. Cultural expectations (known as social norms) are important. For example, social norms in many Western societies encourage people to be competitive and go-getting, and this may help to explain the high levels of aggression in those societies.

The potentially serious costs of aggressive behavior mean that nearly everyone is opposed to it. However, it is commonly believed that aggressive behavior can sometimes have beneficial effects. Suppose you are really angry with your boss or teacher and you release this anger by aggressively punching a pillow or kicking the furniture. According to Freud, this produces **catharsis**, in which the aggressive behavior releases the anger and frustration and reduces the likelihood of subsequent aggression.

Do you believe in catharsis? In fact, the evidence suggests that releasing aggression *increases* rather than *decreases* subsequent aggression! Bushman, Baumeister, and Stack (1999) asked students to write an essay. The essays were returned with extremely negative comments written on them to produce anger in the students. After that, some students spent 2 minutes punching a punching bag (catharsis condition) whereas others did not (control condition). Finally, the students performed a task against a competitor. When

Key Terms

Aggression:
behavior intended to harm or injure another person.

Catharsis:
the notion that behaving aggressively can cause a release of negative emotions such as anger and frustration.

Freud proposed that some aggressive behavior is cathartic, in that it releases anger and tension thereby reducing subsequent aggression. Would you feel better after a pillow fight?

they performed better than the competitor, they had to decide the intensity of shock the competitor should receive. Students in the catharsis condition (punching the punch bag) behaved more aggressively than those in the control condition when choosing the shock intensity.

FACTORS CAUSING AGGRESSION

Aggression is caused by more factors than you can shake a stick at. Accordingly, we will focus on only a few of the most important ones. These factors include aspects of the situation, the personality of the individual, physiological processes, and cognitive processes.

Situational factors

Aggression is much more likely in some situations than in others. Think of occasions when you have behaved aggressively. Many probably involved frustrating situations. Dollard et al. (1939) argued in their frustration–aggression hypothesis that there are close links between frustration and aggression. Pastore (1952) argued that we should distinguish between *justified* and *unjustified* frustration. For example, suppose you are waiting for a bus but the bus driver goes by without stopping. That would be unjustified frustration. However, if it is clear that the bus is out of service, that would be justified frustration. Pastore presented participants with various scenarios, and found that unjustified frustration led to much higher levels of anger than did justified frustration.

Berkowitz (1974) argued that frustration is most likely to lead to aggressive behavior when the situation contains aggressive cues (e.g., a gun or other weapon). Support for his views comes from the **weapons effect**, an increase in aggression caused by the mere sight of a weapon (e.g., a gun). Berkowitz and LePage (1976) used a situation in which male university students received electric shocks from another student. They were then given the chance to give electric shocks to that student. In one condition, a revolver and a shotgun were close to the shock machine. In another condition, nothing was placed nearby. More shocks were given in the presence of the guns. According to Berkowitz (1968, p. 22), "Guns not only permit violence, they can stimulate it as well. The finger pulls the trigger, but the trigger may also be pulling the finger."

Carlson, Marcus-Newhall, and Miller (1990) carried out a meta-analysis on 56 studies concerned with the effects of aggression-related cues on aggressive behavior. Such cues generally led to increased aggressive behavior in negatively aroused individuals. Aggression-related cues also produced aggression-related thoughts even in individuals who hadn't been frustrated, indicating the power of such cues.

Personality

What kinds of people are the most aggressive? Common sense suggests that individuals with low self-esteem have negative thoughts and emotions about themselves and the world, and this causes them to be aggressive. In fact, aggression and violence generally occur more frequently in individuals having *high* self-esteem than in those with low self-esteem (Baumeister, Smart, & Boden, 1996).

Subsequent research has shown that it is only certain individuals with high self-esteem who are at risk of becoming aggressive. More specifically, those most at risk are narcissistic individuals. As well as having high self-esteem, they are arrogant and regard themselves as special and superior to other people. Bushman and Baumeister (1998) provoked their participants by criticizing harshly an essay they had written. Narcissistic individuals were the ones most likely to behave aggressively towards the person who had criticized them. Their self-esteem is rather fragile, and they become aggressive when their unrealistically positive self-image is threatened.

We might expect individuals who focus on the immediate (but not long-term) consequences of their behavior to be more aggressive than most people. Support for this expectation was reported by Joireman, Anderson, and Strathman (2003). Individuals who were high in impulsivity and sensation seeking were more aggressive on several measures than were those low in impulsivity and sensation seeking.

Key Term

Weapons effect: an increase in aggression produced by the sight of a weapon.

Physiological arousal

Think back to occasions on which you have felt angry and behaved aggressively. You probably felt very aroused at the time, suggesting that heightened arousal is one factor associated with aggression. According to Zillmann's excitation-transfer theory, what is important is how the arousal is *interpreted*. If we interpret our aroused state as a consequence of being provoked, then we become angry and aggressive. If we interpret our aroused state as being due to some nonprovoking factor, we shouldn't become aggressive.

Support for excitation-transfer theory was reported by Zillman, Johnson, and Day (1974)—see the Key Study below.

Key Study

Zillmann et al. (1974): Excitation-transfer theory

Support for excitation-transfer theory was reported by Zillman, Johnson, and Day (1974). Male participants were provoked by a confederate of the experimenter. Half the participants rested for 6 minutes and then pedaled on a cycling machine for 90 seconds, whereas the other half pedaled first and then rested. Immediately afterwards, all participants chose the shock intensity to be given to the person who had provoked them. Both groups were moderately aroused at that time, because the effects of pedaling on arousal last for several minutes.

What do you think happened? Zillman et al. (1974) predicted that participants who had just finished cycling would attribute their level of arousal to the cycling and so wouldn't behave aggressively. In contrast, those who had just rested for 6 minutes would attribute their arousal to the provocation, and so would administer a strong electric shock. The results were as predicted.

Discussion points

1. Do you think that excitation transfer happens often in everyday life?
2. Consider ways in which people's attributions of the cause of their arousal could be manipulated.

KEY STUDY EVALUATION

Like many social psychology experiments, Zillmann et al.'s study raises some ethical issues. If participants do not know the true nature of the study, can they give informed consent to take part? Would it be possible to run the experiment if the participants knew of its true intention beforehand? Would those who behaved more aggressively and were prepared to give strong "shocks" have problems later dealing with this probably unwelcome self-knowledge?

Biological factors

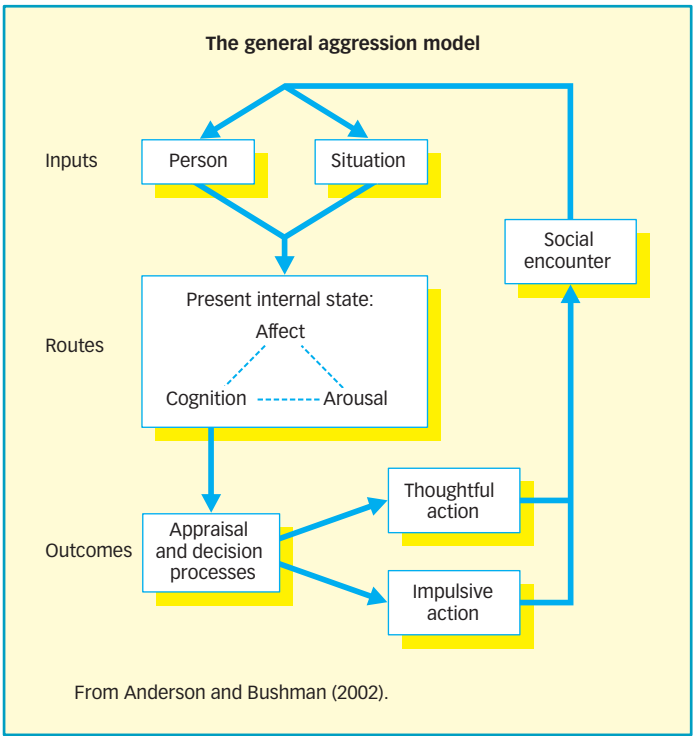
Human aggression depends in part on biological factors. Rhee and Waldman (2002) carried out a meta-analysis of twin and adoption studies on antisocial behavior (including aggressive behavior). Identical twins (sharing 100% of their genes) were more similar in antisocial behavior than fraternal twins (sharing 50% of their genes). That means that genetic factors influence aggressive behavior. More specifically, Rhee and Waldman (2002) found that 41% of the variability in antisocial behavior was a result of genetic influences.

Sex hormones (especially male sex hormones) influence aggressive behavior. Supporting evidence was reported by van Goozen, Frijda, and van de Poll (1995). Transsexuals (individuals who change sex) were studied before and after 3 months of sex

hormone treatment. Female-to-male transsexuals showed increased proneness to aggression after receiving male sex hormones. In contrast, male-to-female transsexuals deprived of male sex hormones had decreased proneness to anger and aggression.

GENERAL AGGRESSION MODEL

We have seen that several factors are involved in aggression. Anderson, Anderson, and Deuser (1996) and Anderson and Bushman (2002) proposed a general aggression model based on these factors (see the figure below). This model consists of four stages:

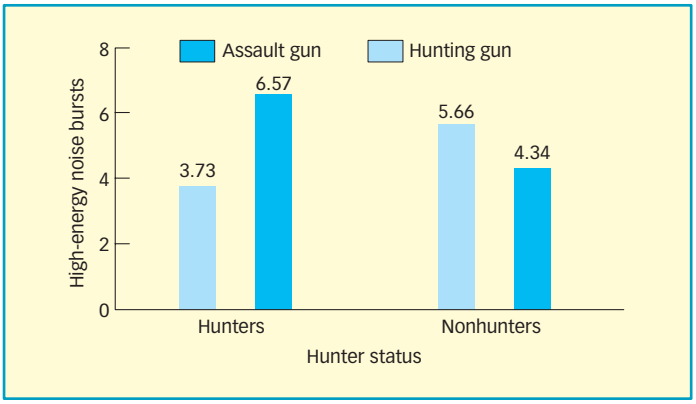


From Anderson and Bushman (2002).

- *Stage 1*: At this stage, the key variables are situational cues (e.g., weapons present) and individual differences (e.g., aggressive personality). For example, Krueger et al. (2001) found that negative affectivity (a personality dimension relating to several negative emotions) correlated +.28 with antisocial or aggressive behavior.
- *Stage 2*: What happens at stage 1 can cause various effects at stage 2, including affect (e.g., hostile feelings), arousal (e.g., activation of the autonomic nervous system), and cognition (e.g., hostile thoughts). All of these effects are connected to each other.
- *Stage 3*: What happens at stage 2 leads to appraisal processes (e.g., interpretation of the situation; possible coping strategies; consequences of behaving aggressively).
- *Stage 4*: Depending on the outcome of the appraisal processes at stage 3, the individual decides whether or not to behave aggressively.

Findings

The general aggression model combines elements of several previous theories. As a result, many of the findings discussed already (e.g., weapons effect) are consistent with the model's predictions. Bartholow, Anderson, Carnagey, and Benjamin (2005) studied the weapons effect using hunting guns (e.g., shotguns; long-range rifles) and assault guns (e.g., handguns; machine guns) as stimuli. They found that hunters associated aggressive concepts more with assault guns than with hunting guns, whereas the opposite was the case for nonhunters. It was predicted from the model that photographs of assault guns would produce more aggressive behavior than photographs of hunting guns in hunters, but the opposite in nonhunters. Aggressive behavior was measured by the intensity of noise that participants were willing to administer to an opponent on a task. The findings were as predicted (see the figure below).



Mean aggressive behavior (number of high-energy noise blasts) as a function of hunter status (hunter vs. nonhunter) and type of gun shown photographically (assault vs. hunting). From Bartholow et al. (2005).

Dill, Anderson, and Deuser (1997) studied the role of appraisal processes. Participants watched a videotape of pairs of people arguing with each other. Those participants having an aggressive personality perceived more aggression and hostility in this interaction than did those with a non-aggressive personality. Individual differences in aggressive behavior may well depend in part on differences in perception and interpretation of any given situation.

Anderson and Bushman (2001) carried out a meta-analysis of studies on violent video games. They considered the effects on aggressive behavior, aggressive thoughts or cognitions, aggressive affect or emotion, and physiological arousal. The situational cues provided by violent video games were associated with aggressive behavior. The overall effect was of moderate size, and its magnitude was similar in males and females, and in children and adults.

According to the general aggression model, aggressive cognitions or thoughts play a central role in the development of the aggressive personality. As predicted, Anderson and Bushman (2001) found that exposure to violent video games increased aggressive cognitions. Exposure to violence also increased aggressive affect or emotion and increased physiological arousal as predicted by the model. As Anderson and Bushman (2001, p. 358) concluded, "Every theoretical prediction derived from prior research and from GAM [general aggression model] was supported by the meta-analysis of currently available research on violent video games."

Evaluation

- (+) The model is more comprehensive in scope than previous theories of aggression.
- (+) Priming effects (e.g., weapons effect) and appraisal processes are of major importance in determining whether someone will behave aggressively.
- (+) There is evidence for an aggressive or antisocial personality (e.g., Krueger et al., 2001) and those high in impulsivity and sensation seeking also tend to be aggressive (Joireman et al., 2003).
- (−) Negative affect, arousal, and negative cognitions all have complex effects on behavior, and it is often difficult to predict whether someone will behave aggressively.
- (−) We probably lack conscious awareness of some of our appraisal processes, but most of the measures used (mainly self-report questionnaires) only assess appraisal processes of which we have conscious awareness.
- (−) The general aggression model provides more of a general framework than a detailed theoretical account.

AGGRESSION IN RELATIONSHIPS

In the real world, most aggression occurs within close relationships and families. For example, Straus, Gelles, and Steinmetz (1980) found in American families that physical assault designed to injure the other person had occurred in 28% of married couples. Why is there so much aggression within close relationships? Gelles (1997) argued that aggressive behavior occurs when the rewards of aggression are perceived to be greater than the likely costs. The perceived costs of behaving aggressively or violently can be relatively low in some close relationships for the following reasons:

1. There are few external social controls because outsiders are reluctant to become involved.
2. There are power inequalities between men and women, with men having more power and physical strength.
3. Some men regard aggression positively as forming part of their image of being a man.

Are men responsible for most of the physical aggression within heterosexual relationships? In fact, the differences in aggression between men and women are surprisingly small in Western cultures. Archer (1982) carried out a meta-analysis of 82 studies and concluded as follows:

> *When measures were based on specific acts, women were significantly more likely than men to have used physical aggression toward their partners and to have used it more frequently, although the effect size was very small . . . When measures were based on the physical consequences of aggression (visible injuries or injuries requiring medical treatment), men were more likely than women to have injured their partners, but again, effect sizes were relatively small (p. 664).*

Thus, women are slightly more likely than men to behave aggressively in a relationship, but men are more likely to inflict physical injury. It might be thought that most female aggression in relationships occurs as self-defense against physical aggression from the male partner. However, this is not supported by the evidence. Straus (1993) found that women admitted they had initiated the aggression in 53% of cases of physical aggression within marriages.

The great majority of studies have been carried out in Western cultures. Men are much more likely to be physically aggressive to their female partners than vice versa in many non-Western cultures (see Archer, 2000, for a review). Why are there these cultural differences? First, in most Western cultures both sexes share the social norm that physical aggression is worse when the aggressor is a man. Second, the belief that men have the right to control their wives' behavior is much less prevalent in Western cultures than in some other, male-dominated cultures.

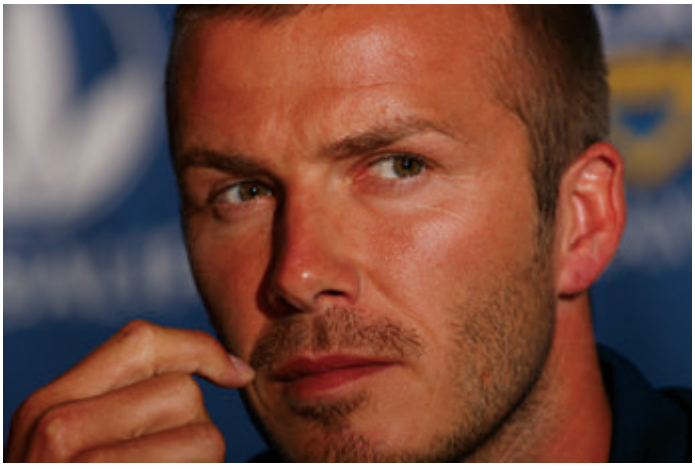
FORMATION OF INTERPERSONAL RELATIONSHIPS

Numerous factors are involved in the formation of interpersonal relationships, and there are several types of interpersonal relationships. However, we focus mostly on six key factors determining our choice of friends and romantic partners: physical attractiveness; proximity; familiarity; attitude similarity; demographic similarity [similarity in background characteristics]; and similarity in personality. Why are various kinds of similarity so important? Rubin (1973) suggested various answers. First, communication is easier with people who are similar to us. Second, similar others may (with a bit of luck!) confirm the rightness of our attitudes and beliefs. Third, if we like ourselves, then we will probably like others who resemble us. Fourth, those who are similar to us are likely to enjoy the same activities.

PHYSICAL ATTRACTIVENESS

When meeting a stranger, we notice their physical appearance. This includes how they are dressed, whether they are clean or dirty, and often includes an assessment of their physical attractiveness. People tend to agree about whether someone is physically attractive. Women whose faces resemble those of young children are often perceived as attractive. Thus, photographs of females with relatively large and widely separated eyes, a small nose, and a small chin are regarded as attractive. However, wide cheekbones and narrow cheeks are also seen as attractive (Cunningham, 1986), and these features are uncommon in young children.

Cunningham (1986) also studied physical attractiveness in males. Men having features such as a square jaw, small eyes, and thin lips were regarded as attractive by women. These features can be regarded as indicating maturity, as they are rarely found in children.



David Beckham fits Cunningham's "attractive male" characteristics—square jaw, small eyes, and thin lips.

Average faces are regarded as attractive. Langlois, Roggman, and Musselman (1994) found that male and female computer-generated composites or "averaged" faces were perceived as more attractive than the individual faces forming the composite. Why was this? Langlois discovered that averaged faces were regarded as more familiar than the individual faces. They argued that this sense of familiarity made the averaged faces seem attractive. Averaged faces are also more symmetrical than individual faces, and symmetry is associated with attractiveness (Grammer & Thornhill, 1994).

According to evolutionary psychologists, men should prefer women whose physical features indicate high fertility. Zaadrstra et al. (1993) discussed two such features. First, the body mass index (BMI), based on the

relationship between height and weight, is between 20 and 30 in the most fertile women. Second, the waist-to-hip ratio is approximately .70 in the most fertile women.

The evidence suggests that waist-to-hip ratio is important in physical attraction. Singh (1993) found that women with a waist-to-hip ratio of .70 were judged to be the most attractive. The evidence on BMI is less supportive of evolutionary psychology. Rubinstein and Caballero (2000) found that there was a steady decrease in BMI for the winners of the Miss America Pageant between 1923 and 1999. In addition, the emphasis on thinness in women within most Western cultures is by no means universal. Anderson, Crawford, Nadeau, and Lindberg (1992) considered 52 different cultures, and found that women with a heavy body were preferred in cultures in which the food supply was very unreliable. It was mainly in Western cultures in which the food supply is very reliable that women with a slender body were preferred (see the table below).

The above findings may be somewhat suspect. Fan, Liu, Wu, and Dai (2004) pointed out that most studies on BMI and waist-to-hip ratio used only two-dimensional images. They used three-dimensional images, and found that the most important determinant of physical attractiveness was the volume–height index (VHI), defined as the body volume divided by the square of the height. VHI is highly correlated with BMI but predicts ratings of female physical attractiveness better.

Dion, Berscheid, and Walster (1972) found that physically attractive people are thought to have more positive traits and characteristics than less attractive ones. They interpreted their findings as supporting the "beauty-is-good" stereotype. However, these findings were equally consistent with the "unattractiveness-is-bad" stereotype. Griffin and Langlois (2006) found that it was actually more the case that being unattractive is a disadvantage rather than that being attractive is a positive advantage.

Matching hypothesis

Walster, Aronson, Abrahams, and Rottman (1966) put forward the matching hypothesis. According to this hypothesis, people are attracted to those of about the same level of physical attractiveness as themselves. We are initially attracted to those who are beautiful or handsome, but realize that we are unlikely to be found attractive by someone much more physically attractive. As a result, we become attracted to those about as physically attractive as we are (perhaps with some reluctance!).

The evidence obtained by Walster et al. (1966) and by Walster and Walster (1969) supported the matching hypothesis—see the Key Study below.

Anderson et al. (1992): Results

	Food supply			
Preference	**Very unreliable**	**Moderately unreliable**	**Moderately reliable**	**Very reliable**
Heavy body	71%	50%	39%	40%
Moderate body	29%	33%	39%	20%
Slender body	0%	17%	22%	40%

Key Study

Walster et al.: The matching hypothesis

Walster et al. (1966) organized a dance at which students were randomly allocated partners of the opposite sex. Halfway through the dance, the students filled in a questionnaire giving their views on their partner. These views were compared with judges' ratings of the students' physical attractiveness. The more physically

attractive students were liked most by their partners. However, Walster et al. found 6 months later that partners were more likely to have dated if they were similar in physical attractiveness.

Walster and Walster (1969) also organized a dance. This time, however, the students had met each other beforehand. This may have led them to think realistically about the qualities they were looking for in a partner. As predicted, students expressed the most liking for those at the same level of physical attractiveness.

Discussion points

1. Does the matching hypothesis seem correct in your experience?
2. Why does physical attractiveness play such an important part in dating behavior and in relationships?

KEY STUDY EVALUATION

Walster et al.'s matching hypothesis suggests that people are attracted to those of about the same level of physical attractiveness as themselves. This may indeed be the case in many situations, but it does not take account of many social factors that can also influence who we find attractive. Relationships often occur between people who have different levels of attractiveness but have got to know each other through working together or living nearby. Here mechanisms other than pure physical attractiveness are operating. In other situations, people who are generally considered very attractive may find that others think they are unapproachable. Some people may believe that a less attractive partner will be less likely to stray than a very attractive partner, and so have more confidence in the relationship.

Feingold (1988) carried out a meta-analysis of studies in which the physical attractiveness of relationship partners was assessed. The average correlation was +.49 between physical attractiveness levels of the partners in romantic couples. This indicates that couples are generally fairly similar in physical attractiveness, and supports the matching hypothesis.

PROXIMITY

Proximity or nearness influences our choice of friends and those with whom we develop a relationship. Festinger, Schachter, and Back (1950) studied married graduate students assigned randomly to apartments in 17 different two-story buildings. About two-thirds of their closest friends lived in the same building. Close friends living in the same building were twice as likely to be living on the same floor as on the other floor.

Friendships arise and are maintained between people who live close to each other, and who enjoy similar leisure pursuits.

The importance of proximity extends to romantic relationships leading to marriage. Bossard (1932) looked at 5000 marriage licenses in Philadelphia. Those getting married tended to live close to each other. That is less true nowadays because people are much more mobile. It is also less true because of the dramatic increase in the use of the internet as a way of forming a relationship. McKenna, Green, and Gleason (2002) found that individuals who expressed their true selves best on the internet were most likely to form a lasting and close relationship. Of interest, they also found that undergraduate students had greater liking for each other after an internet meeting than after a face-to-face meeting.

IMPRESSION FORMATION

What happens when we form an initial impression of someone else? According to Asch (1946), we use an implicit personality theory, assuming that a person who has one particular personality trait will have various other, related traits. For example, suppose you know that a fellow student is a generally anxious person. You might expect him/her to be fairly disorganized in his/her studying and to lack confidence in his/her abilities.

Asch (1946) claimed that key aspects of personality (central traits) influence the impression we form of others more than do other aspects of personality (peripheral traits). He also argued that our very first impressions are of crucial importance in determining our overall view of someone else. Information about another person that is presented first will have more influence than information presented later—this is known as the **primacy effect**, and there is much evidence for its existence (e.g., Asch, 1946; Belmore, 1987). What causes the primacy effect? Belmore (1987) found that people reading statements about another person spent less and less time on each successive statement.

In one of his studies, Asch (1946) gave participants a list of seven adjectives, which were said to describe an imaginary person called X. All the participants were given the following six adjectives: intelligent, skilful, industrious, determined, practical, and cautious. The seventh adjective was warm, cold, polite, or blunt. Then the participants had to select other adjectives that best described X.

The findings were clear-cut. The adjectives "warm" and "cold" were central traits, having marked effects on how all the other information about X was interpreted. For example, when X was warm, 91% of the participants thought he was generous, and 94% thought he was good-natured. In contrast, when X was cold, only 8% of the participants thought he was generous, and 17% thought he was good-natured. Thus, people believe that those who are warm have several other desirable characteristics, whereas those who are cold possess mostly undesirable characteristics.

Asch's (1946) study was very artificial. Kelley (1950) carried out a less artificial study in which students rated a guest lecturer described beforehand as being rather cold or very warm. The lecturer was rated much more positively on several dimensions (e.g., sociability; popularity; humor) when he was described as warm. The warm–cold manipulation also influenced the students' behavior. They interacted more with him and asked more questions when he had been described as warm.

There are other central traits in addition to the warm–cold dimension. For example, Rosenberg, Nelson, and Vivekananthan (1968) claimed that two dimensions are of crucial importance in impression formation:

1. *Social evaluation*: The good end of this dimension has adjectives such as sociable, popular, and warm, and the bad end includes unsociable, cold, and irritable.
2. *Intellectual evaluation*: This dimension ranges from skilful and persistent (good end) to stupid and foolish (bad end).

In contrast, Vonk (1993) found that three dimensions were of central importance: evaluation (good–bad), potency (strong–weak), and social orientation (sociable–independent). Asch's warm–cold dimension formed an important part of the evaluation dimension, and there was no evidence supporting the notion of a separate intellectual dimension.

Key Term

Primacy effect: in social psychology, the notion that our impressions of other people are heavily influenced by the first information about them we encounter.

SIMILARITY

As was mentioned earlier, there are several ways in which two people can be similar or dissimilar. These include similarity in personality, attitude similarity, and demographic similarity. We will make a start by considering similarity in personality.

The saying, "Opposites attract," implies that we are most likely to become friends or to have a relationship with those who are very different from us. However, there is another saying, "Birds of a feather flock together," implying that we are attracted to similar people. Nearly all the evidence supports this latter view. For example, Burgess and Wallin (1953) obtained information about 42 personality characteristics from 1000 engaged couples. There was no evidence at all for the notion that opposites attract. The couples showed a significant amount of similarity for 14 personality characteristics (e.g., feelings easily hurt; leader of social events).

Byrne (1971) found that strangers holding similar attitudes to participants were rated as more attractive than those holding dissimilar attitudes. Is this difference more a result of our liking of those with similar attitudes or of our dislike for those having dissimilar attitudes? Rosenbaum (1986) addressed that issue, finding that dissimilarity of attitudes increased disliking more than similarity of attitudes increased liking. This may happen because we feel threatened and fear disagreements when we discover that the other person has attitudes very different to our own.

Sprecher (1998) studied the importance of similarity in romantic relationships, opposite-sex friendships, and same-sex friendships. Similarity of interests and leisure activities was more important than similarity of attitudes and values in same- and opposite-sex friendships. However, the opposite was the case for romantic relationships. Demographic similarity or similarity of background characteristics was relatively unimportant in all three kinds of relationship.

There is a final (and unexpected) way in which similarity influences those to whom we are attracted. Jones, Pelham, Carvallo, and Mirenberg (2004) downloaded birth records from a Texas state government website. By chance alone, only 6.27% of the married couples should have had surnames starting with the same letter. In fact, they found that 10.37% of the couples had the same surname initial, which is 65% more than expected by chance. However, it might be unwise to marry someone on the basis of having the same surname initial!

There are two exceptions to the hypothesis that we are more attracted to those who are similar to us. First, there are cross-cultural differences. Heine and Renshaw (2002) found that Americans liked those who were perceived to be similar to them, but this was not true of Japanese participants. Japanese participants tended to like individuals who were familiar to them. Second, Amodio and Showers (2005) found that the importance of similarity in liking for a romantic partner depended on the level of commitment. Perceived similarity was positively related to liking in high-commitment relationships, but was actually *negatively* related to liking in low-commitment relationships. The latter finding may have occurred because being with someone dissimilar provides opportunities for personal growth for the participants (who were young college students).

RULES IN INTERPERSONAL RELATIONSHIPS

Most interpersonal relationships are governed by unspoken rules. The rules applied to interpersonal relationships vary depending on the nature of the relationship. However, Argyle, Henderson, and Furnham (1985) found some general rules when their participants rated the importance of several rules in each of 22

relationships. The six most important rules (in descending order of importance) were as follows:

1. Respect the other person's privacy.
2. Don't discuss with someone else things said in confidence.
3. Look the other person in the eye during conversation.
4. Don't criticize the other person publicly.
5. Don't indulge in sexual activity with the other person (except in romantic relationships, of course!).
6. Seek to repay all debts, favors, or compliments.

There are several rules governing interpersonal relationships. If any of these rules are broken, e.g., don't discuss with someone else things said in confidence, this will likely jeopardize the friendship.

How do we know these rules are actually important? Argyle et al. (1985) studied broken friendships. As predicted, "the lapse of friendship was attributed in many cases to the breaking of certain rules, especially rules of rewardingness and rules about relations with third parties, e.g., not being jealous, and keeping confidences" (Argyle, 1988, pp. 233–234).

There are interesting cultural differences in the importance attached to certain rules. For example, people in Hong Kong and Japan were more likely than those in Britain or Italy to support rules such as obeying superiors, preserving group harmony, and avoiding loss of face (Argyle et al., 1986).

What functions are served by rules within interpersonal relationships? According to Argyle and Henderson (1984), some rules (regulatory rules) reduce conflict within relationships, because they indicate what is acceptable. There are also reward rules, which ensure that the rewards provided by each person are appropriate.

SEX DIFFERENCES

Friendships between men are generally less intimate than those between women. Why is this so? Reis, Senchak, and Solomon (1985) considered various explanations. First, men may define intimacy differently to women. This explanation was rejected, because men and women didn't differ in their intimacy ratings of video fragments of people interacting.

Second, there may be no differences in friendship intimacy, but men are less inclined to label their own behavior as intimate. However, Reis et al. (1985) asked participants to indicate the level of intimacy revealed in actual conversation narratives, carefully edited so that it was totally unclear whether they came from a man or a woman. Male and female participants both perceived the narrative to be more intimate when it came from a woman.

Third, men may lack the social skills needed for same-sex intimacy. Reis et al. (1985) asked men and women to have an intimate conversation with their best friend. Men performed this task as well as women, indicating that they have the necessary skills for intimate friendship. After rejecting all of the above explanations, Reis et al. concluded that women's role in society (e.g., caring for children) motivates them to develop intimate and nurturing relationships.

MATE SELECTION

One of the key findings in the area of mate selection is that like mates with like. We tend to mate with those reasonably similar to us in physical attractiveness, attitudes, and personality. However, men tend to prefer younger women and women tend to prefer older men. Buss (1989) found in 37 cultures around the world that men in every culture preferred women younger than themselves, and women preferred men older than themselves in all cultures except Spain. Buss found that the personal qualities of kindness and intelligence were regarded as important by both sexes in virtually every culture.

According to evolutionary psychologists, what men and women find attractive in the opposite sex are features maximizing the probability of producing offspring who will survive and prosper. The reason is that we want our genes to carry over into the next generation. Younger women are preferred to older ones because older women are less

In Buss's (1989) study, women preferred older men, as they were deemed more able to provide adequately for potential offspring. However, in modern Western society, where many women no longer rely economically on their partner, the opposite is also often seen.

likely to be able to have children. Women prefer older men because they are more likely to provide adequately for the needs of their offspring.

The approach offered by evolutionary psychologists is inadequate (see also discussion in Chapter 3). Evolutionary psychologists don't explain why men and women in nearly all cultures regard kindness and intelligence as being more important than age. More generally, culture accounted for 14% of the variation in mate preferences in Buss's (1989) data, whereas gender accounted for only 2.4% of the variation. Evolutionary psychologists consistently underestimate the importance of cultural factors when explaining social behavior.

Buss (1989) found in his cross-cultural study that men in nearly all cultures claimed to be more influenced by physical attractiveness than did women. Feingold (1990) carried out various meta-analyses, also finding that physical attractiveness is rated as more important for romantic attraction by men. However, this gender difference was greater when based on self-report rather than on behavioral data. This suggests that females may not be fully aware of the importance they actually attach to male physical attractiveness. For example, Sprecher (1989) found that women attributed the attraction they experienced toward a man to his earning potential and expressiveness rather than his physical attractiveness. In fact, however, men and women were equally influenced by physical attractiveness when choosing a partner.

Feingold (1992) carried out meta-analyses of studies (mostly American) that had focused on self-reports of the attributes that men and women desired in a potential mate. The largest gender differences were found with respect to status and ambition, with women rating these attributes as more important than men.

DEVELOPMENT OF CLOSE RELATIONSHIPS

What is a "close relationship"? According to Berscheid and Reis (1998, p. 199), we

> *would require the interaction pattern to reveal that the partners frequently influence each other's behavior . . . that each person's influence on the other is diverse . . . that the influence is strong, and, moreover, that all these properties have characterized the partners' interaction for a considerable duration of time.*

It is difficult to assess the development of close relationships scientifically. For example, we can't easily study the process of falling in love under laboratory conditions! What is typically done is to use questionnaires to assess the processes involved in relationships, the level of satisfaction with relationships, and so on. There are two main potential problems with such questionnaire data. First, people may deliberately distort their answers (e.g., exaggerating how in love they are). Second, people often lack a detailed *conscious* understanding of the processes involved in a close relationship.

LOVE

Our feelings for those with whom we develop close or romantic relationships typically include love. As would be expected, love is important within marriage. Huston et al. (2001) assessed how much newlyweds loved each other. Those who subsequently divorced within 2 years of marriage were less in love shortly after marriage than were those who remained married.

What exactly do we mean by "love"? Some people argue that we should leave it to poets to answer that question. However, many psychologists have shed light on the

mystery of love. For example, Lamm and Wiesmann (1997) distinguished among "liking," "loving," and "being in love." According to them, "liking" means wanting to interact with the other person, "loving" means trusting and feeling psychologically close to the other person, and "being in love" includes feeling psychologically close but also means being aroused by the other person.

On average, women disclose more personal and sensitive information about themselves to same-sex friends than men do.

Bartels and Zeki (2000) considered love from the perspective of brain imaging. Male and female participants who were "truly, deeply, and madly in love" had their brain activity recorded while looking at pictures of their partner and of friends. Love produced a pattern of activation and deactivation that overlapped with patterns previously found with other emotions. However, the evidence indicated that "a unique network of areas is responsible for evoking this affective state [i.e., love]." The areas activated by love (e.g., anterior cingulate; insula; and caudate nucleus) are also activated by other emotions. One brain area deactivated by love was the right prefrontal cortex, which is activated by sadness and depression. Another brain area deactivated by love was the amygdala, an area activated by fear and aggression.

Psychological closeness or intimacy forms a very important part of love. Central to intimacy is **self-disclosure** (revealing personal or intimate information about oneself). For example, Sprecher and Hendrick (2004) studied intimate relationships. The amount of self-disclosure was positively associated with the quality of the relationship in terms of satisfaction, love, and commitment.

It is often claimed that women have higher levels of self-disclosure in their various relationships than do men. Dindia and Allen (1992) reviewed over 200 studies. They found that women self-disclose more than men with their romantic partners of the opposite sex and with their same-sex friends. However, these gender differences were fairly small. Lin (1992) found that relationship intimacy depended much more on the amount of emotional self-disclosure than of self-disclosure of factual information.

Early attachments

Freud argued that the behavior exhibited by adults is strongly influenced by their childhood experiences. Thus, for example, children who had an intense and secure attachment to their mother or other caregiver generally become adults capable of emotional intimacy. In contrast, children who had an insecure attachment to their mother find it more difficult to enjoy loving relationships in adulthood. Hazan and Shaver (1987) obtained some support for this position. Adults who had had secure attachments as children described their love experiences as happy, friendly, and trusting. Adults who had had anxious and ambivalent [with mixed emotions] attachments reported love as involving obsession and extreme sexual attraction and jealousy. Finally, adults who had had insecure, avoidant attachments in childhood feared intimacy and jealousy, and weren't convinced they needed love to be happy. These types of childhood attachment are discussed more fully in Chapter 16.

Klohnen and Bera (1998) studied 21-year-old women who were avoidantly attached (e.g., distrustful, self-reliant) or securely attached (e.g., trusting, emotionally open). The differences between these two groups had their origins in childhood. The avoidantly attached women were more likely to have suffered the loss of a parent and to have experienced open conflict during childhood. By the age of 43, 95% of the securely attached women had been married and only 24% had divorced. Only 72% of the avoidantly attached women had been married, and 50% of them had divorced.

Meyers and Landsberger (2002) considered the effects of attachment style on marital satisfaction. There were the expected positive effects of secure attachment style on marital satisfaction and negative effects of avoidant attachment style. More

Key Term

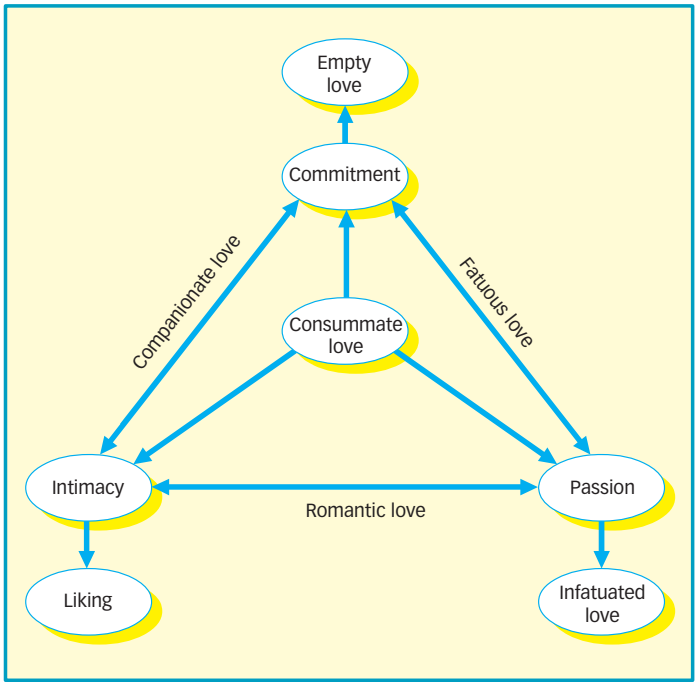
Self-disclosure: revealing personal or intimate information about oneself to someone else.

specifically, secure attachment style reduced psychological distress, which in turn enhanced marital satisfaction. Avoidant attachment style increased psychological distress and reduced social support, and these effects in turn reduced marital satisfaction. Thus, the effects of attachment style on marital satisfaction tend to be *indirect* rather than *direct*.

Sternberg's theory

Sternberg (1986) developed a triangular theory of love. Within this theory, love consists of three components: intimacy; passion; and decision/commitment. Sternberg (1986, p. 120) defined these components as follows:

> *The intimacy component refers to feelings of closeness, connectedness, and bondedness in loving relationships . . . The passionate component refers to the drives that lead to romance, physical attraction, sexual consummation, and related phenomena . . . The decision–commitment component refers to, in the short term, the decision that one loves someone else, and in the long term, the commitment to maintain that love.*



Sternberg (1998) developed these ideas. He argued that the three components differ in several ways from each other. Intimacy and commitment are usually fairly stable in close relationships, whereas passion is relatively unstable and can fluctuate considerably. We have some control over our level of commitment, whereas intimacy is difficult to control and passion is even harder to control deliberately.

Sternberg (1986) argued that there are several kinds of love based on different combinations of the three components (see figure on the left).

- *Liking or friendship*: Intimacy but not passion or commitment.
- *Romantic love*: Intimacy and passion but not commitment.
- *Companionate love*: Intimacy and commitment but not passion.
- *Empty love*: Commitment but not passion or intimacy.
- *Fatuous love*: Commitment and passion but not intimacy.
- *Infatuated love*: Passion but not intimacy or commitment.
- *Consummate love*: Commitment, passion, and intimacy.

Findings

Who do we love and like the most? Sternberg and Grajek (1984) found that men love and like their lover better than their mother, father, sibling closest in age, or their best friend. Women also loved and liked their lover and best friend more than their mother, father, or sibling closest in age. However, they loved their lover and their best friend of the same sex equally, but liked their best friend more than their lover.

There is much additional evidence indicating that strong love doesn't have to involve sexual desire and arousal. For example, Hatfield et al. (1988) asked young people between the ages of 4 and 18 to assess their feelings for an opposite-sexed boyfriend or girlfriend. The intensity of love feelings was similar at all ages.

Aron and Westbay (1996) asked participants to indicate the centrality of 68 words and phrases to the concept of love. Data analysis produced three factors similar to those of Sternberg. The passion factor was closely associated with euphoria, butterflies in the stomach, heart rate increases, gazing at the other, wonderful feelings and sexual passion. Intimacy was closely associated with openness, feeling free to talk about anything,

supportiveness, honesty, and understanding. Commitment was closely associated with devotion, putting the other first, protectiveness, and loyalty.

Aron and Westbay (1996) asked participants to complete a questionnaire based on the three love components with respect to their current or most recent love relationship. For both men and women, intimacy was the most important component in love, followed by commitment, with passion the least important.

Evaluation

- (+) Sternberg has identified probably the three key factors associated with love.
- (+) Most love relationships can be easily categorized (e.g., as romantic love; fatuous love) on the basis of the pattern across the three components.
- (−) The three components are fairly closely associated or correlated with each other, and so are not entirely separate.
- (−) There has been a heavy reliance on self-report questionnaires, which only assess those aspects of love that can be expressed in words.

ATTRIBUTIONS

Those involved in a close relationship often try to understand the other person's behavior. This involves attributing their behavior to various causes (see Chapter 17). According to Fincham (e.g., Fincham & Hewstone, 2001), attributions for negative events or behavior are especially important to the wellbeing of a relationship. He distinguished between distress-maintaining and relationship-enhancing attributions. Distress-maintaining attributions are those in which the partner's negative behavior is attributed to his/her personality and so is very likely to occur again. In contrast, relationship-enhancing attributions involve blaming the situation rather than the partner for his/her negative behavior (e.g., "His/her work is very stressful and demanding").

Two main predictions follow from this theoretical approach. First, distress-maintaining attributions should decrease satisfaction with the relationship. Second, the couple's attributions should predict their behavior towards each other. These predictions have been tested mostly with married couples.

Findings

Bradbury and Fincham (1990) found couples were much more likely to attribute their spouse's negative behavior to personal, unchanging characteristics in poor marriages than in good ones. In poor marriages, positive behavior by the spouse was dismissed as being a result of the situation and thus unlikely to last.

The key issue is deciding what causes what. Do negative attributions play a role in causing marital dissatisfaction (as predicted by the theory), or does marital dissatisfaction lead to negative attributions? Fincham and Bradbury (1993) carried out a 12-month study to answer this question. Initial attributions predicted subsequent marital satisfaction, whereas level of marital satisfaction didn't predict subsequent attributions. Thus, attributions influence marital satisfaction rather than the other way around.

Bradbury and Fincham (1992) found that attributions made by married couples influence their behavior towards each other. Wives who made distress-maintaining attributions were more likely than those making relationship-enhancing attributions to behave negatively in response to their husband's negative behavior. This pattern was observed in marriages low and high in marital satisfaction.

Evaluation

- (+) Spouses' attributions about each other's behavior are associated with their level of marital satisfaction and with their behavior towards each other.
- (+) Distress-maintaining attributions cause reduced marital satisfaction rather than vice versa.
- (−) Marriage partners typically explain their spouse's behavior on the basis of very detailed, specific knowledge about him/her, but this is not emphasized within the attribution theory approach.
- (−) Focusing on relationship-enhancing attributions has positive effects in the short term, but is not always positive in the long term. For example, suppose the husband has been unemployed for several months because he is extremely lazy. Attributing his inability to find work to a lack of jobs may encourage him to make little effort to find work and may lead to future problems within the marriage.

INVESTMENT MODEL

What determines an individual's commitment to his/her current relationship? The obvious answer is the degree of attraction or love he/she has towards his/her partner. No one disputes that. However, Rusbult (e.g., 1983) argued in his investment model that other factors are also important. More specifically, three factors jointly determine an individual's commitment to a relationship:

- *Satisfaction*: This is based on the rewards and costs of the relationship coupled with an evaluation of those rewards and costs relative to those the individual feels he/she deserves.
- *Perceived quality of alternatives*: Individuals are more committed to their current relationship if there are no preferable options (e.g., an attractive alternative partner).
- *Investment size*: Commitment is greater the more time, effort, money, and personal sacrifices have been invested in a relationship.

Findings

Rusbult (1983) tested the investment model in a longitudinal (long-term) study of heterosexual couples. Changes in any of the three factors (satisfaction; quality of alternatives; investment) produced the predicted changes in commitment. The only finding that failed to support the model was that increased costs failed to reduce either satisfaction or commitment.

According to the investment model, individuals compare their current relationship with alternatives. Rusbult et al. (2000) found that most people compare their relationship against those of others. There was strong evidence of perceived superiority (regarding one's own relationship as better than those of other people). Couples with high levels of commitment had greater perceived superiority. The level of perceived superiority within married couples predicted their level of adjustment 20 months later and also predicted whether the marriage would end in divorce.

Why do many women who have repeatedly been physically abused keep returning to the man responsible? It wasn't possible to predict which women would return from a women's shelter to their partner based on their feelings for him (Rusbult & Martz, 1995). As predicted by the model, what mattered was the woman's level of investment in the relationship (e.g., joint children) coupled with poor alternatives (e.g., insufficient money to survive on her own).

Le and Agnew (2003) carried out a meta-analysis of 52 studies on the investment model. The model was supported by three main findings. First, about 65% of the variance (variability) in commitment was accounted for by the three variables of satisfaction, quality of alternatives, and size of investment. Second, the level of commitment predicted the likelihood of relationship break-up. Third, the strength of support for the model did not vary as a function of ethnicity or duration of the relationship.

Evaluation

- (+) Commitment to a relationship depends on the attractiveness of alternatives and level of investment in the relationship as well as on the satisfaction it provides.
- (+) Commitment leads to perceived superiority, and this helps to maintain relationships.
- (−) The investment model largely ignores individual differences. For example, individuals distrustful of others because of childhood experiences are less likely than other people to commit themselves fully to a relationship (Shaver, Hazan, & Bradshaw, 1988).
- (−) It is assumed theoretically that satisfaction, perceived quality of alternatives, and investment size all have *separate* influences on commitment. However, reality is often more complex. For example, someone with low commitment to a current relationship may actively seek an attractive alternative and may refuse to invest in the relationship (e.g., by having a child).

Chapter Summary

Prosocial behavior

- According to evolutionary psychology, people often behave altruistically toward members of their family to ensure the survival of their own genes. Their helping behavior with nonrelations involves reciprocal altruism, which is much greater in the human species than in others.
- According to Darley and Latané, bystanders are often reluctant to assist a victim because there is a diffusion of responsibility. In addition, the norm of social responsibility is only weakly activated when there are several bystanders.
- According to the arousal/cost–reward model, bystanders who are aroused by an incident decide whether to assist a victim by working out the rewards and costs involved. In fact, however, bystanders often respond impulsively and without deliberation.

Aggression

- Aggression is especially prevalent in many Western societies in part because social norms encourage people to be competitive and go-getting.

- Aggressive behavior is most likely when the situation contains aggressive cues, the individual concerned is impulsive or sensation seeking, and he/she interprets his/her aroused state as being a result of provocation.
- According to the general aggressive model, people decide whether to behave aggressively after appraising or interpreting the situation, considering possible coping strategies, and working out the likely consequences of behaving aggressively.
- In Western cultures, men and women are about equally likely to behave aggressively in close relationships. Aggressive behavior in such relationships occurs because there are few external social controls and because of power inequities between men and women

Formation of interpersonal relationships

- Women whose faces resemble those of young children are perceived as attractive, as are men whose facial features indicate maturity. Physical attractiveness in women also depends on factors such as waist-to-hip ratio, body mass index, and volume–height index.
- There is support for the matching hypothesis, according to which we are attracted to those of about the same physical attractiveness as ourselves.
- There is a primacy effect when we form an initial impression of someone else. Our impressions are influenced most by a few central traits (e.g., warm–cold) rather than by more peripheral traits.
- We are attracted to other people who are similar to us in personality and attitudes, partly because they are easier to relate to.
- The maintenance of interpersonal relationships involves adhering to various unspoken rules (e.g., respect the other person's privacy).
- Friendships between women tend to be more intimate than those between men. This may be the case because women's role in society (e.g., caring for children) encourages them to develop intimate relationships.
- Men prefer women younger than themselves and women prefer men older than themselves. This has been explained in evolutionary terms. However, the evolutionary approach cannot readily explain why men and women both attach more importance to kindness and intelligence in a mate than to age.

Development of close relationships

- Self-disclosure (especially emotional disclosure) is important within close relationships. Women self-disclose more than men with their romantic partners of the opposite sex.
- As Freud predicted, adults who had a secure attachment to their mother in childhood are more likely to have rewarding and lasting romantic relationships than those who had an insecure attachment to their mother.
- According to Sternberg, love consists of intimacy, passion, and decision/commitment. There are several kinds of love based on different combinations of these components, but intimacy is the most important component.
- Attributing one's partner's negative behavior to his/her personality leads to decreased marital satisfaction. Wives making such attributions are more likely than those making more positive attributions to behave negatively in response to their husband's negative behavior.
- According to the investment model, an individual's commitment to a relationship depends on satisfaction, perceived quality of alternatives, and investment size.
- Couples with high levels of commitment regard their own relationship as better than those of other people to a greater extent than other couples, and are less likely to divorce.
- Women who have been physically abused by their husband but who keep returning to him do so because of high investment and a lack of attractive alternatives.

Further Reading

- Anderson, C.A., & Bushman, B.J. (2002). Human aggression. *Annual Review of Psychology*, *53*, 27–51. This chapter by two leading experts provides a useful framework for considering human aggression.
- Brehm, S.S., Kassin, S.M., & Fein, S. (2005). *Social psychology* (6th ed.). Boston, MA: Houghton Mifflin. All of the main topics discussed in this chapter are considered in this introductory textbook.
- Hewstone, M., & Stroebe, W. (2001). *Introduction to social psychology* (3rd ed.). Oxford, UK: Blackwell. There is good coverage of prosocial behavior, aggressive behavior, friendship, and close relationships in Chapters 9, 10, and 12 of this edited book.
- Hogg, M.A., & Vaughan, G.M. (2005). *Social psychology* (4th ed.). Harlow, UK: Prentice Hall. Chapters 12, 13, and 14 of this textbook cover in detail the topics discussed in this chapter.
- Myers, D.G. (2005). *Social psychology* (8th ed.). New York: McGraw-Hill. Several chapters in this well-established textbook are concerned with social behavior and relationships.
- Rusbult, C.E., & Van Lange, P.A.M. (2003). Interdependence, interaction and relationships. *Annual Review of Psychology*, *54*, 351–375. The authors discuss the ways in which relationships are affected by several different factors.

Chapter 19

Contents

19 Group processes

What we say (and how we behave) is heavily influenced by other people. They possess useful knowledge about the world, and it is often sensible to pay attention to what they say. In addition, we want to be liked by other people, and to fit into society. As a result, we sometimes hide what we really think, and behave in ways that will earn the approval of others. All these issues relate to **social influence**, "the process whereby attitudes and behavior are influenced by the real or implied presence of other people" (Hogg & Vaughan, 2005, p. 655).

Social influence is observed when the behavior of individuals is determined by the instructions given by those in a position of authority (e.g., police; doctors). We start this chapter by considering obedience to authority. However, most social influence occurs within groups. The rest of this chapter is concerned with groups and with their influences on the beliefs and behavior of group members. What do we mean by a group? According to Brown (2000, p. 3), "A group exists when two or more people define themselves as members of it and when its existence is recognized by at least one other [person or group]."

There are many kinds of group processes. These include conformity pressures, group cohesiveness, and group norms. The performance of groups often differs from that of individuals. Within groups, we need to consider the role of the leader (the person most influencing group members). Finally, social or group influence affects the behavior of individuals in crowds.

As you read this chapter, think about individuals and groups you encounter every day. Which individuals and groups have most influence over your behavior? Why is this the case? As we will see, a key finding in this area is that our behavior is often influenced much more by other people than we like to think.

OBEDIENCE TO AUTHORITY

In nearly all societies, some people are given power and authority over others. In our society, for example, parents, teachers, and managers have varying degrees of authority. This generally doesn't cause problems. If the doctor tells us to take some tablets three times a day, most of us accept he/she is the expert and do as requested. Suppose, however, you are asked by a person in authority to do something wrong. For example, Adolf Eichmann was found guilty of ordering the deaths of millions of Jews during the Second World War. He denied any moral responsibility, claiming he had simply been carrying out other people's orders. The best-known research on obedience to authority was carried out by Stanley Milgram, and is discussed in the Key Study on the following page.

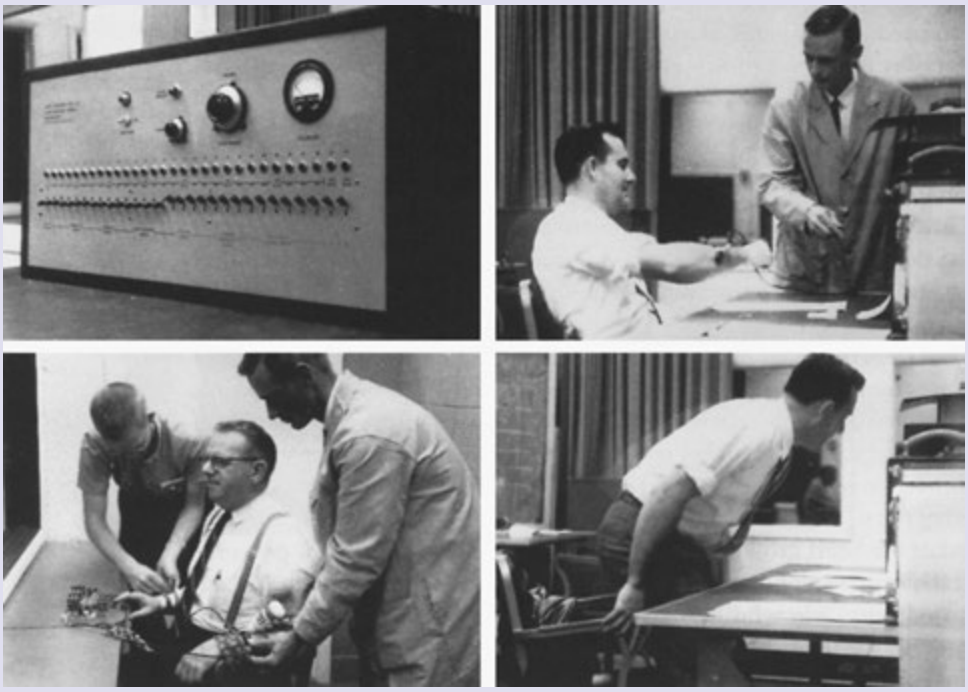
Key Term

Social influence: a process in which an individual's attitudes and/or behavior are influenced by another person or by a group.

Key Study

Milgram: Obedience to authority

Milgram (1963, 1974) reported the findings from several studies carried out at Yale University. Pairs of participants were given the roles of teacher and learner for a simple learning test. In fact, the "learner" was always a confederate employed by Milgram to behave in certain ways. The "teacher" was told to give electric shocks to the "learner" every time the wrong answer was given and to increase the shock intensity each time even though the learner had a heart condition. The apparatus was actually arranged so that the learner received no electric shocks, but the teacher didn't know that. At 180 volts, the learner yelled, "I can't stand the pain," and by 270 volts the response had become an agonized scream. The maximum shock intensity was 450 volts, which was potentially fatal. If the teacher was unwilling to give the shocks, the experimenter urged him/her to continue.



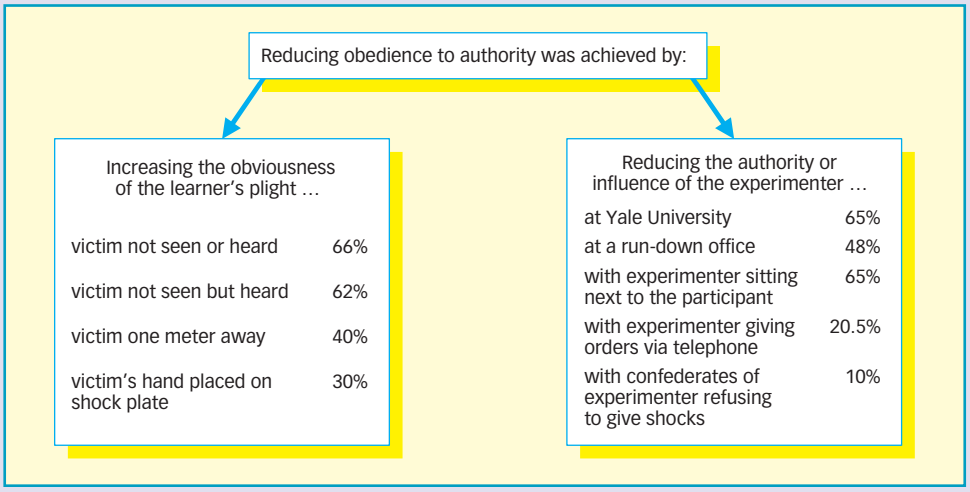
Milgram's (1974) "obedience" experiment. Top left: the "shock box"; top right: the experimenter demonstrating the shock box to the "teacher"; bottom left: wiring the "learner" up to the apparatus; bottom right: one of the "teachers" refusing to continue with the experiment.

Would you have been willing to give the maximum (and potentially deadly) 450-volt shock? Milgram found that everyone he asked denied they personally would do any such thing. He also found that 110 experts on human behavior (e.g., psychiatrists) predicted that no one would go on to the 450-volt stage. In fact, about 65% of Milgram's participants (there was no gender difference) gave the maximum shock using his standard procedure—this is *hugely* different from expert predictions!

Milgram (e.g., 1974) discovered two ways in which obedience to authority could be reduced (see the figure on the following page):

1. Increasing the obviousness of the learner's plight.
2. Reducing the experimenter's authority or influence.

The impact of the first factor was studied by comparing obedience in four situations differing in the extent to which the learner was made aware of the suffering he/she was inflicting (the percentage of totally obedient participants is



shown in brackets):

- *Touch-proximity*: The participant had to force the learner's hand onto the shock plate (36%).
- *Proximity*: The learner was 1 meter away from the participant (40%).
- *Voice feedback*: The victim could be heard but not seen (62%).
- *Remote feedback*: The victim couldn't be heard or seen (66%).

Milgram (1974) reduced the experimenter's authority by staging an experiment in a run-down office building rather than in Yale University. The percentage of totally obedient participants decreased from 65% at Yale University to 48% in the run-down office building. The experimenter's influence was also reduced by having him give orders by telephone rather than sitting close to the teacher. This reduced obedience from 65% to 20.5%. Finally, the authority of the experimenter was reduced by having him being apparently an ordinary member of the public rather than a white-coated scientist. This reduced obedience to 20%.

In a further study, Milgram (1974) used three teachers, two of whom were confederates working for the experimenter. In one condition, the two confederates were rebellious and refused to give severe shocks. Only 10% of the participants were fully obedient in this condition.

Discussion points

1. Do most people simply obey authority in a rather mindless way?
2. What are the main factors determining whether or not there is obedience to authority?

KEY STUDY EVALUATION

Milgram's work on obedience to authority has always been regarded as rather controversial. His most surprising finding was that approximately two-thirds of the participants proceeded to the maximum 450-volt electric shock, whereas experts expected that no one would do so. However, it needs to be emphasized that most of those who used the maximum electric shock did so very reluctantly, and showed clear signs of stress and internal conflict. It is possible that this was due in part to the fact that Milgram's studies took place in the 1970s, after attitudes to rebellion and individualism had been changed by the social and political movements of the previous decade. Parallels have been drawn between Milgram's findings and the behavior of people such as Nazi concentration camp guards, who protested that they were only following orders (discussed further shortly). However, other studies have shown that levels of obedience can be reduced in real-life situations when groups of people challenge authority. Permission to run studies such as Milgram's original one would probably not be granted today on ethical grounds, but at least his work showed that conformity and obedience depend on many factors and are more prevalent than might be imagined.

Modigliani and Rochat (1995) re-analyzed Milgram's own data based on audio recordings of conversations between the experimenter and the teacher. Of participants who protested verbally at an early stage, not one administered the maximum shock, and only 17% delivered more than 150 volts. There was considerably less disobedience among participants who only began to protest later in the experiment. Thus, it was important for participants to "break the ice" by voicing their concerns very early in the experiment if they were to refuse to obey the experimenter's instructions.

Milgram's studies were carried out in the United States during the 1960s and 1970s, and it is important to know whether his findings generalize to other cultures at other times. Bond and Smith (1996) considered the relevant cross-cultural evidence. The percentage of totally obedient participants was very high in several countries. It was 80% or higher in Italy, Spain, Germany, Austria, and Holland, in many cases several years after Milgram's studies.

Milgram's research was laboratory-based, and it would be valuable to use more naturalistic situations. Hofling et al. (1966) carried out a real-life study in which 22 nurses were telephoned by someone claiming to be "Dr. Smith." The nurses were asked to check that a drug called Astroten was available. When the nurses did this, they saw on the bottle that the maximum dosage was 10 mg. When they reported back to Dr. Smith, he told them to give 20 mg of the drug to a patient.

There were two good reasons why the nurses should have refused to obey. First, the dose was double the maximum safe dose. Second, the nurses didn't know Dr. Smith, and they were supposed to take instructions only from doctors they knew. However, the nurses' training had led them to obey instructions from doctors. There is a clear power structure in medical settings, with doctors in a more powerful position than nurses. The nurses were more influenced by the power structure than by the hospital regulations: all but one did as Dr. Smith instructed.

Similar findings were reported by Lesar, Briceland, and Stein (1997) in a study on medication errors in American hospitals. Nurses typically carried out doctors' orders even when they had good reasons for doubting the wisdom of those orders. However, Rank and Jacobsen (1997) found that only 11% of nurses obeyed a doctor's instructions to give too high a dose to patients when they talked to other nurses beforehand.

Theoretical accounts

Why is there so much obedience to authority? Milgram (1974) argued there are three main reasons:

1. Experience has taught us that authorities are generally trustworthy and legitimate, and so obedience to authority is often appropriate. For example, it would be disastrous if those involved in carrying out an emergency operation refused to obey the surgeon's orders!
2. The orders given by the experimenter moved gradually from the reasonable to the unreasonable. This made it difficult for participants to notice when they began to be asked to behave unreasonably.
3. The participants were put into an "agentic" state, in which they became the instruments of an authority figure and so ceased to act according to their conscience. Someone in the agentic state thinks, "I am not responsible, because I was ordered to do it!" According to Milgram (1974), this tendency to adopt the agentic state, "is the fatal flaw nature has designed into us."

Milgram was too pessimistic. Most obedient participants experienced a strong conflict between the experimenter's demands and their own conscience. They seemed very tense and nervous, they perspired, they bit their lips, and they clenched and unclenched their fists. Such behavior does *not* suggest they were in an agentic state.

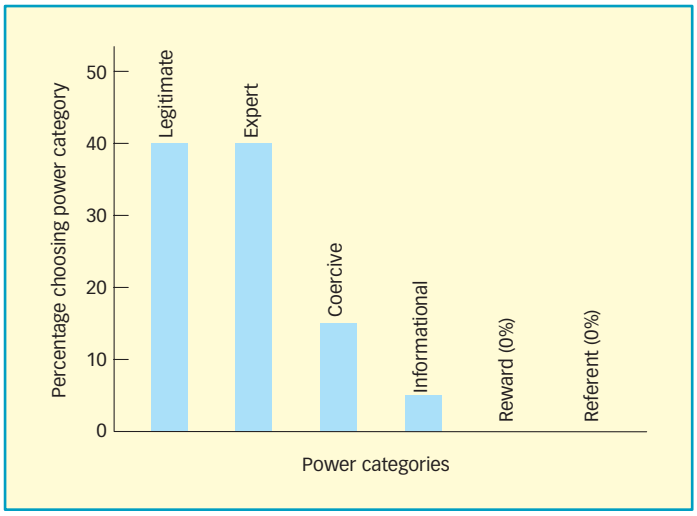
Some researchers (e.g., Blass & Schmitt, 2001) have drawn a distinction between social power based on harsh *external* influences (e.g., hierarchy-based legitimate power) and social power based on soft influences *within* the authority figure (e.g., expertise; credibility). Milgram emphasized the importance of harsh influences, but soft influences are also important. Blass and Schmitt presented participants with a 12-minute edited version of Milgram's documentary film, *Obedience*. They had to choose the best explanation for the strong obedience to authority shown in the film from the following

choices based on various sources of power:

- *Legitimate*: Experimenter's role as authority figure.
- *Expert*: Experimenter's superior expertise and knowledge.
- *Coercive*: The power to punish the participant for noncompliance.
- *Informational*: The information conveyed to the participant was sufficient to produce obedience.
- *Reward*: The power to reward the participant for compliance.
- *Referent*: The power occurring because the participant would like to emulate the authority figure.

The sources of power most often chosen were legitimate power (a harsh influence) and expertise (a soft influence) (see figure on the right). These findings are important in two ways. First, they show that Milgram was only partially correct when explaining obedience to authority in terms of legitimate power. Second, they indicate that obedience to authority in the Milgram situation depends on at least two different sources of power.

Milgram argued there are links between his findings and the horrors of Nazi Germany. However, we mustn't exaggerate the similarities. First, the values underlying Milgram's studies were the positive ones of understanding more about human learning and memory, in contrast to the vile ideas prevalent in Nazi Germany. Second, most participants in Milgram's studies had to be watched closely to ensure their obedience, which wasn't necessary in Nazi Germany. Third, most of Milgram's participants experienced great conflict and agitation, whereas those who carried out atrocities in Nazi Germany often seemed unconcerned about moral issues.



Percentages choosing each power category as the best explanation for obedient participants' behavior in Milgram's research. Based on data in Blass and Schmitt (2001).

Why was the actual behavior of Milgram's participants so different from what most people would have expected? The **fundamental attribution error** (the tendency to overestimate the importance of other people's personality in determining their behavior) is involved (see Chapter 17). When we decide how many people would show total obedience in Milgram's situation, we think as follows: "Only a psychopath would give massive electric shocks to another person. There are very few psychopaths about, and so practically no one would be totally obedient." This line of reasoning focuses only on the role of personality. In fact, Milgram's participants were strongly influenced by situational factors such as the

Key Term

Fundamental attribution error: exaggerating the importance of personality and minimizing the role of the situation in determining another person's behavior.

Unquestioning obedience to authority may have catastrophic consequences. The pictures show row upon row of SS members marching down a road during the 1933 Nuremberg rally, and (right) survivors of the Auschwitz concentration camp at the end of the war in 1945, following a decade of persecution, imprisonment, and genocide.

Case Study: *The My Lai Massacre*

The My Lai massacre has become known as one of the most controversial incidents in the Vietnam War. On December 14, 1969 almost 400 Vietnamese villagers were killed in under 4 hours. The following transcript is from a CBS News interview with a soldier who took part in the massacre.

Q. How many people did you round up?
A. Well, there was about forty, fifty people that we gathered in the center of the village. And we placed them in there, and it was like a little island, right there in the center of the village, I'd say…And…
Q. What kind of people—men, women, children?
A. Men, women, children.
Q. Babies?
A. Babies. And we huddled them up. We made them squat down and Lieutenant Calley came over and said, "You know what to do with them, don't you?" And I said yes. So I took it for granted that he just wanted us to watch them. And he left, and came back about ten or fifteen minutes later and said, "How come you ain't killed them yet?" And I told him that I didn't think you wanted us to to kill them, that you just wanted us to guard them. He said, "No. I want them dead." So—
Q. He told this to all of you, or to you particularly?
A. Well, I was facing him. So, but the other three, four guys heard it and so he stepped back about ten, fifteen feet, and he started shooting them. And he told me to start shooting. So I started shooting, I poured about four clips into the group.
Q. You fired four clips from your …
A. M-16.
Q. And that's about how many clips—I mean, how many—
A. I carried seventeen rounds to each clip.
Q. So you fired something like sixty-seven shots?
A. Right.
Q. And you killed how many? At that time?
A. Well, I fired them automatic, so you can't—You just spray the area on them and so you can't know how many you killed 'cause they were going fast. So I might have killed ten or fifteen of them.
Q. Men, women and children?
A. Men, women and children.
Q. And babies?
A. And babies.

experimenter's insistence that the participant continue to give shocks, the scientific expertise of the experimenter, and so on. Of particular importance, the experimenter repeatedly told concerned participants that he took full responsibility for what happened. Tilker (1970) found that there was a substantial reduction in obedience when participants were told that they (rather than the experimenter) were responsible for their actions.

Evaluation

- (+) A high level of obedience to authority has been found in many cultures over several decades.
- (+) Milgram's findings seem to be among the most unexpected and surprising in the history of psychology.
- (+) Milgram's findings are directly relevant to many everyday situations (e.g., doctor and nurse interactions; teacher and student interactions).
- (−) There are limitations with Milgram's notion of an agentic state and with his emphasis on the legitimacy of the authority figure as the major influence on participants' behavior.
- (−) The findings are less dramatic than commonly assumed. As Jones (1998, p. 32) argued, "The degree of compliance [in the Milgram studies] could be readily understood once the extremely active role of the experimenter was fully detailed, something that was not at all clear in the earlier experimenter reports."
- (−) There are serious ethical problems with Milgram's research (see Chapter 2). First, participants didn't give their informed consent. Second, they weren't free to leave the experiment if they wanted to do so—the experimenter urged them to continue if they wanted to stop. Third, participants were subjected to considerable conflict and distress. However, 84% of Milgram's participants reported they were glad to have taken part in his research (Milgram, 1974).

CONFORMITY

Conformity "refers to the act of changing one's behavior to match the responses of others" (Cialdini & Goldstein, 2004, p. 606). It involves yielding to group pressures in the absence of an explicit order or request, something nearly everyone does sometimes. Suppose you go to a movie with friends. You really didn't like it, but all your friends thought it was absolutely brilliant. Admit it—you would be tempted to conform by pretending that you also found the movie brilliant.

The figure below shows some differences between obedience and conformity. Research on conformity differs in three ways from research on obedience. First, the participant decides what to do rather than being told how to behave. Second, the participant is typically of equal status to the group members trying to influence him/her, whereas he/she is usually of lower status than the person issuing the orders in studies on obedience. Third, participants' behavior in conformity studies is mainly influenced by the need for acceptance, whereas obedience is determined by social power.

Conformity is often considered undesirable. However, that is only true sometimes. For example, suppose all your friends studying psychology have the same view on a given topic in psychology, but it differs from yours. If they know more about the topic, it is probably sensible to conform to their views rather than sticking rigidly to your own!

Even the most independent of individuals can feel the need to conform under social pressure from peers.

Differences between obedience and conformity

OBEDIENCE	CONFORMITY
Occurs within a hierarchy. Actor feels the person above has the right to prescribe behavior. Links one status to another. Emphasis is on power.	Regulates the behavior among those of equal status. Emphasis is on acceptance.
Behavior adopted differs from behavior of authority figure.	Behavior adopted is similar to that of peers.
Prescription for action is explicit.	Requirement of going along with the group is often implicit.
Participants embrace obedience as an explanation for their behavior	Participants often deny conformity as an explanation for their behavior.

ASCH'S RESEARCH

Will individuals conform to group pressure when the correct answer is obvious but every other member of the group produces the same incorrect answer? Solomon Asch (1951, 1956) carried out very important research and came up with an answer to that question that may well differ from your expectation!—see the Key Study below.

Key Study

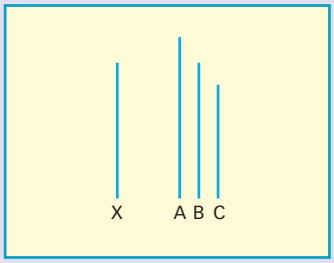
Asch: Conformity and group pressure

Asch devised a situation in which approximately seven people sat looking at a display. They had to say out loud which one of three lines (A, B, or C) was the same length as a given stimulus line, with the experimenter working his/her way around the group members in turn. All but one were confederates of the experimenter, instructed to give the same wrong answer on some trials. The one genuine participant was the last (or the last but one) to offer his/her opinion on each trial. The performance of participants exposed to such group pressure was compared to performance in a control condition with no confederates.

Asch's (1951) findings were dramatic. On the crucial trials on which the confederates all gave the same wrong answer, the genuine participants also gave the wrong answer on between 33% and 37% of these trials in different studies. Compare these figures against an error rate of under 1% in the control condition.

Key Term

Conformity: yielding to group pressures in the absence of a direct request or order.



Asch showed lines like this to his participants. Which line do you think is the closest in height to line X? A, B, or C? Why do you think over 30% of participants answered A?

Thus, even though the correct answers were obvious, there was substantial conformity to the incorrect answers given by the other group members.

Asch (1956) manipulated various aspects of the situation to understand more fully the factors underlying conformity behavior. The conformity effect increased as the number of confederates increased from one to three, but there was no increase thereafter. However, a small increase in conformity has sometimes been found as the number of confederates goes up above three (see van Avermaet, 2001).

Another important factor is whether the genuine participant has a supporter in the form of a confederate giving the correct answer on all trials. Asch (1956) found that the presence of a supporter meant that conformity was observed on only 5% of trials. More surprisingly, a confederate whose answers were even more incorrect than those of the other confederates also produced a substantial reduction in conformity.

Asch's research raises ethical issues. His participants didn't provide fully informed consent, because they were misled about key aspects of the experimental procedures (e.g., presence of confederates). In addition, they were put in a difficult and embarrassing position.

Discussion points

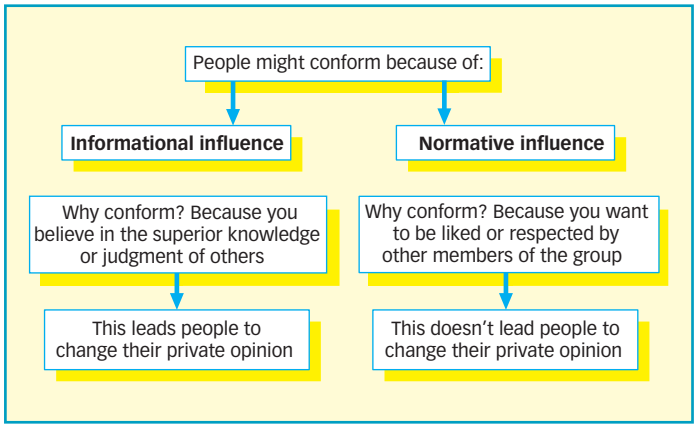
1. Do Asch's findings apply outside the artificial situation he used in his studies?
2. Asch carried out his research in the United States. Why might the findings be different in other cultures?

KEY STUDY EVALUATION

Asch is renowned for his work on conformity. In a situation where the correct answer was obvious people would agree with an incorrect answer on about 35% of trials. Only 25% of Asch's participants gave the correct answer on all the trials despite the incorrect answers of their fellow participants. The remaining 75% showed at least some tendency to conform to the confederates' views. Thus, a clear majority of participants were somewhat influenced by the confederates. However, the study took place in America in the 1950s before "doing your own thing" came to be regarded as socially acceptable. Also, Asch's participants were put in a difficult and embarrassing position, which may have led to greater levels of conformity because of the particular culture prevailing at the time. When participants had a supporter present, who gave the correct answer before the participant responded, conformity to the incorrect response dropped dramatically. This suggests that social pressure and the feeling of being in a conflict situation may have been a major factor in the unexpectedly high level of conformity in the original study.

Asch's research on conformity is among the most famous in the whole of social psychology. Oddly, however, there was nothing very social about his research because he used groups of strangers! Suppose we introduced more social factors into the situation by having the participants identify other group members as belonging to one of their ingroups or to an outgroup. This was done by Abrams et al. (1990) using first-year students of introductory psychology as participants. The confederates were introduced as first-year students of psychology from a nearby university (ingroup) or as students of ancient history from the same university (outgroup). You would probably guess that participants would show more conformity in the presence of an ingroup. However, the

size of the effect was dramatic. There was conformity on 58% of trials in the presence of an ingroup compared to only 8% with an outgroup. Thus, conformity depends to a large extent on the individual's perception of other group members as an ingroup or an outgroup.



Theoretical implications

Deutsch and Gerard (1955) argued that people might conform in Asch-type studies for two reasons. First, there is **normative influence**, which occurs when someone conforms because he/she wants to be liked or respected by group members. Second, there is **informational influence**, which occurs when someone conforms because of the superior knowledge or judgment of others (see the figure above). Bond (2005) presented a meta-analysis of 125 Asch-type conformity studies. Normative influence was stronger when participants made public responses and were face-to-face with the majority (as in Asch's research). In contrast, informational influence was stronger when participants made private responses and communicated only indirectly with the majority.

Erb et al. (2002) explored factors determining which type of influence was dominant. The majority had mainly a normative influence when an individual's previously formed opinions were strongly opposed to those of the majority. In contrast, the influence was mostly informational when an individual's opinions differed only moderately from those of the majority.

Cross-cultural studies

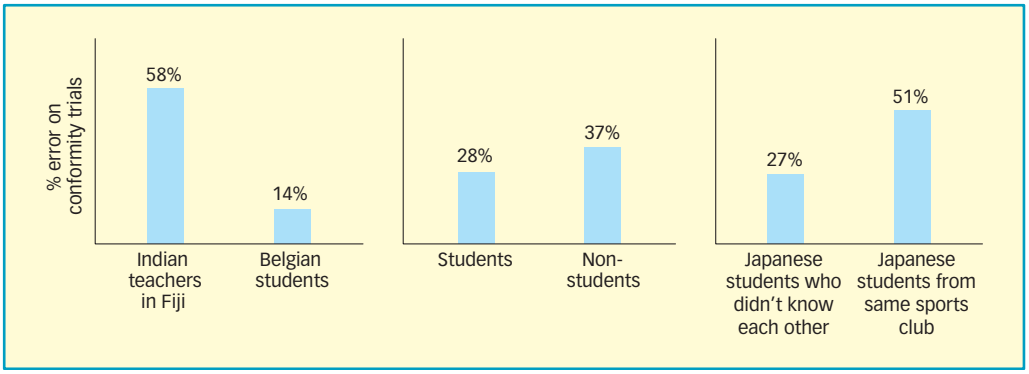
Asch's research was carried out in the United States in the 1940s and 1950s. Americans may be more conformist than other people, and perhaps people were more conformist before it became fashionable to "do your own thing." In fact, the effects observed by Asch are reasonably robust. There have been numerous cross-cultural studies of conformity using Asch's experimental design (see the figure below). The participants gave the wrong answer on average on 31.2% of trials across these studies (Bond & Smith, 1996), only slightly lower than what Asch found.

We would expect conformity to be greater in collectivistic cultures than in individualistic ones. Collectivistic cultures (e.g., China) emphasize group needs over those of individuals, and emphasize a sense of group identity. In contrast, individualistic cultures (e.g., the UK; the United States) emphasize the desirability of individuals having a personal sense of responsibility. Thus, nonconformity is seen as deviance in collectivistic cultures but as uniqueness in individualistic ones (Kim & Markus, 1999). Bond and Smith (1996) analyzed numerous Asch-type studies in several countries. Conformity was greater in collectivistic cultures in Asia, Africa, and elsewhere (37.1% of trials) than in individualistic cultures in North America and Europe (25.3%).

Key Terms

Normative influence: this occurs when an individual conforms so that others in the group will like or respect him/her.

Informational influence: this occurs when an individual conforms because others in the group are believed to possess more knowledge.



When Asch's study was replicated cross-cultural differences emerged.

Evaluation

- (+) Asch's findings have been very influential, because he found much conformity even in an unambiguous situation in which the correct answer was obvious.
- (+) Asch identified key factors (e.g., number of confederates; presence vs. absence of a supporter) determining the level of conformity.
- (+) Asch's findings have been replicated in many countries over a period of several decades.
- (−) Asch only studied conformity in a trivial situation in which the participants' deeply held beliefs were not called into question.
- (−) Asch's situation was limited in that he only assessed conformity among strangers. In fact, conformity effects are much greater when the group members all belong to the same ingroup (Abrams et al., 1990).
- (−) Asch did not explain in detail *why* there are conformity effects, because he did not identify the underlying psychological processes.

MINORITY INFLUENCES ON MAJORITIES

Asch was concerned with the influence of the majority on a minority (typically of one) within a group. However, social influences operate in both directions: majorities influence minorities, but minorities also exert influence on majorities. The most developed theory in this area is that of Moscovici (1976, 1980), and so we will consider his research.

An important real-life example of a minority influencing a majority was the suffragette movement in the early years of the 20th century. A relatively small group of suffragettes argued strongly for the initially unpopular view that women should be allowed to vote. The hard work of the suffragettes, combined with the justice of their case, finally led the majority to accept their point of view.

What happens when a minority influences a majority? According to Moscovici's dual-process theory, disagreements from a minority of group members can cause the members of the majority to engage in a validation process. This validation process involves focusing on the information contained in the arguments put forward by the minority (i.e., informational influence). This can lead to **conversion**, in which there is more effect on private beliefs than public behavior. It is difficult for a minority to influence the majority, and Moscovici (1980) argued that this happens most often when the minority puts forward a clear and consistent position.

What happens when a majority influences a minority? Moscovici (1980) argued that members of the minority are subject to a comparison process, in which they focus on the differences between their views and those of the majority. This triggers the need for consensus, which often leads to **compliance**, involving public rather than private influence (i.e., normative influence). Thus, there is a greater effect on public behavior than on private beliefs. Compliance often occurs rapidly and without much thought. In contrast, conversion is more time-consuming and occurs only after cognitive conflict and much thought. The take-home message is that a minority can have more profound effects on the majority than the majority has on the minority.

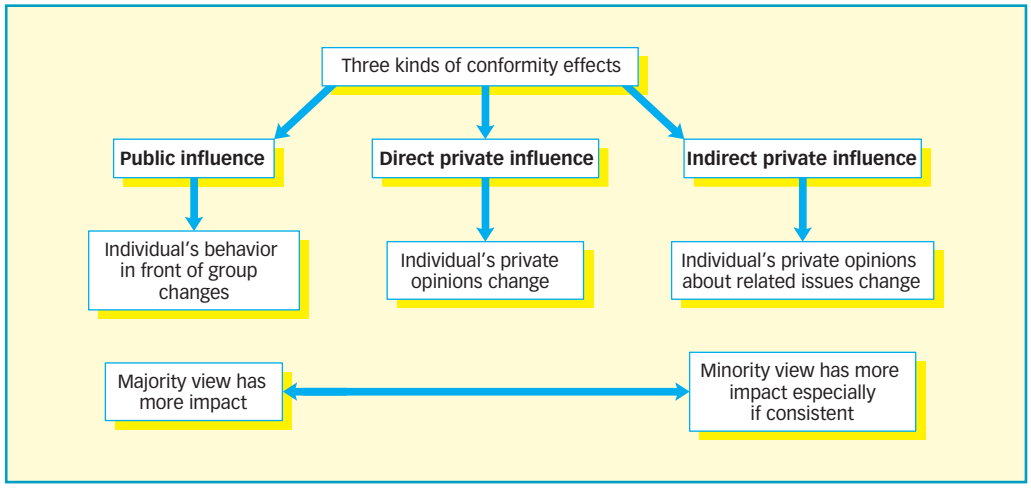
Key Terms

Conversion: the influence of a minority on a majority based on convincing the majority that its views are correct; see **compliance**.

Compliance: the influence of a majority on a minority based on the power of the majority; see **conversion**.

Findings

Moscovici, Lage, and Naffrenchoux (1969) found that minorities have to be consistent to influence majority judgments. Groups of six participants were presented with blue slides varying in intensity, and each member of the group said a simple color. Two confederates of the experimenter said "Green" on every trial or on two-thirds of the trials. The percentage of "Green" responses given by the majority was 8% when the minority responded consistently, but only 1% when the minority responded inconsistently.



Maass and Clark (1983) carried out a study on attitudes to gay rights. In one condition, the majority favored gay rights and the minority did not, and in another condition the majority opposed gay rights and the minority favored gay rights. Publicly expressed attitudes generally conformed to the majority view. However, privately expressed attitudes tended to agree with those of the minority.

Nemeth, Mayseless, Sherman, and Brown (1990) found that minorities can make group members engage in more thorough processing than majorities, as predicted by Moscovici's dual-process theory. Participants listened to word lists. A majority or a minority consistently drew attention to words belonging to certain categories. There was then a recall test for the words presented. The words to which attention had been drawn were much better recalled when a minority had drawn attention to them, presumably because they had been processed more thoroughly.

Wood et al. (1994) identified three conformity effects predicted by Moscovici (see the figure above):

1. *Public influence*, in which the individual's behavior in front of the group is influenced by the views of others. This should occur mostly when majorities influence minorities.
2. *Direct private influence*, in which there is a change in the individual's private opinions about the issue discussed by the group. This should be found mainly when minorities influence majorities.
3. *Indirect private influence*, in which the individual's private opinions about related issues change. This should also be found mostly when majorities are influenced by minorities.

Wood et al. carried out various meta-analyses to test for the existence of these three effects. As predicted, majorities in most studies had more public influence than minorities. Also as predicted, minorities had more indirect private influence than majorities, especially when their opinions were consistent. However, majorities had more direct private influence than minorities, which is opposed to the prediction from Moscovici's theory.

David and Turner (1999) argued that minority influences will *only* be found when the minority is perceived as part of the ingroup. The participants were moderate feminists exposed to the minority views of extreme feminists. The participants were influenced by the minority when they believed their fellow participants were mostly anti-feminists, but not when they were said to be moderate feminists. Why was this? The extreme feminists were more likely to be perceived as part of the ingroup (feminists vs. nonfeminists) by individual moderate feminists when most of the other participants were identified as anti-feminists. In contrast, the extreme feminists were relegated to an outgroup when most of the participants were identified (correctly) as moderate feminists.

Evaluation

- (+) Minorities often influence majorities.
- (+) The influence of minorities on majorities is mainly in the form of private rather than public agreement, with the opposite pattern being found when majorities influence minorities.
- (−) The common finding that minorities are less influential than majorities on direct private measures (e.g., Erb et al., 2002; Wood et al., 1994) is not readily explained by Moscovici's dual-process theory.
- (−) Majorities generally differ from minorities in several ways (e.g., power; status). Differences in the social influence exerted by majorities and minorities may depend on power or status rather than on their majority or minority position within the group.
- (−) Moscovici exaggerated the differences between the ways in which majorities and minorities exert influence. As Smith and Mackie (2000, p. 371) concluded, "Minorities are influential when their dissent offers a consensus, avoids contamination [i.e., obvious bias], and triggers private acceptance—the same processes by which all groups achieve influence."

BASIC GROUP CHARACTERISTICS

Groups come in all shapes and sizes, and their goals can vary enormously (e.g., build a bridge; climb mountains; have fun). However, virtually all groups share certain key features. Every group has a level of cohesiveness varying between very low and very high, with its level of cohesiveness having consequences for its functioning. Every group also has norms indicating the behavior regarded as acceptable or desirable. Individuals need to abide by most of these norms to be fully accepted by the other group members.

Finally, there are systematic changes in the relationship between individuals and the group. For example, the individual's commitment to the group increases as he/she moves toward full membership of the group, but then decreases again as he/she experiences growing dissatisfaction with the group.

Key Term

Group cohesiveness: the extent to which group members are attracted to the idea of the group.

GROUP COHESIVENESS

What is **group cohesiveness**? According to Brown (2000, p. 46), it can be defined in terms of "group members' attraction to the idea of the group, its consensual prototypical [ideal example] image and how that is reflected in typical member characteristics and behavior."

Conforming to group norms is a part of group membership. At a soccer game, supporters are conforming to prescribed norms such as wearing certain clothes and singing certain songs.

It is often assumed that group cohesiveness leads to improved group performance. Mullen and Copper (1994) found in a meta-analysis that the average correlation between group cohesiveness and group performance was only +.25. This suggests that group cohesiveness is not of great importance in determining performance. However, the association between cohesiveness and performance was greater in some types of groups (e.g., sports teams) than in others (e.g., laboratory groups). Cohesiveness based on interpersonal attraction was more weakly related to group performance than cohesiveness based on commitment to the group's task.

The correlational evidence discussed above doesn't allow us to decide whether cohesiveness helps to determine performance or whether performance helps to determine cohesiveness. In general, the evidence indicates there are stronger effects of performance on cohesiveness than of cohesiveness on performance (Mullen & Copper, 1994). However, that was not the case in a study by Slater and

Sewell (1994). They assessed cohesiveness and performance in university hockey teams at two points during the season. There were effects of cohesiveness on performance and of performance on cohesiveness, but those of cohesiveness on performance were greater.

The effects of group cohesiveness are greater on job satisfaction than on group performance. One reason may be because more social support is available in cohesive groups. This could help to explain why members of cohesive groups cope better with stress than members of noncohesive groups (Bowers, Weaver, & Morgan, 1996).

SOCIAL NORMS

What are social norms? According to Fehr and Fischbacher (2004, p. 185), **social norms** "are standards of behavior that are based on widely shared beliefs how individual group members ought to behave in a given situation." Social norms fulfill several purposes. First, they provide guidance as to appropriate behavior (especially in ambiguous situations), and play a part in explaining conformity behavior and groupthink (discussed shortly). Second, most group norms are related to the goals of the group, and so facilitate achievement of those goals (see section on collective behavior later in the chapter). Third, norms help to maintain group identity. Fourth, "The human capacity to establish and enforce social norms is perhaps the most decisive reason for the uniqueness of human cooperation in the animal word" (Fehr & Fischbacher, 2004, p. 189).

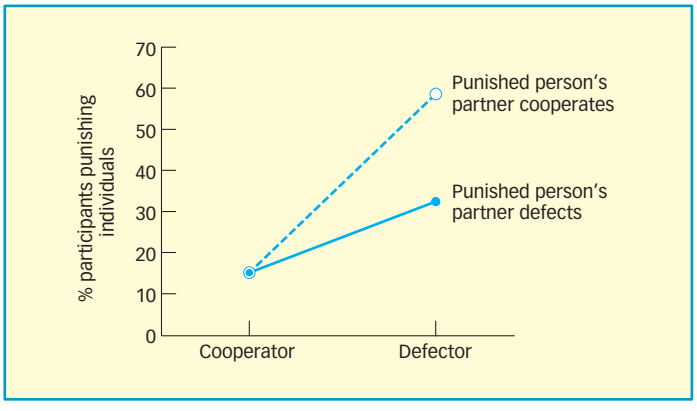
Newcomb (1961) carried out a classic study on norm formation at Bennington College, a small private institution in the United States. There was a great contrast between its predominantly liberal political ethos and the extremely conservative, upper-middle-class families from which most of the students came. There was a presidential election shortly after the first-year students arrived at Bennington College, with most of them preferring the conservative Republican candidate to the more liberal Democratic candidate, Roosevelt (62% vs. 29%, respectively). Very few favored Socialist or Communist candidates (9%). In contrast, 54% of third- and fourth-year students favored Roosevelt and 28% chose Socialist or Communist candidates, with only 18% favoring the Republican candidate. Thus, over time the liberal norms of Bennington College became more important to the students than their parents' conservative norms. Newcomb, Koenig, Flacks, and Warwick (1967) found that, 25 years after leaving Bennington College, the ex-students remained liberal in their political views.

The impact of norms on behavior was studied by Neighbors, Larimer, and Lewis (2004). Heavy-drinking students at the University of Washington estimated how much the average student drank (perceived drinking norm) and were then shown the true figure (actual drinking norm). Not surprisingly, the perceived drinking norm was typically much higher than the actual drinking norm. Over the following 6 months, these students showed a highly significant reduction in drinking behavior, and reductions in perceived drinking norms were responsible for much of this reduction. Thus, the students' behavior was much influenced by their perception of social norms for students' drinking.

Key Term

Social norms: agreed standards of behavior within a group (e.g., family; organization).

Fehr and Fischbacher (2004) argued that human cooperation is based mainly on a social norm of conditional cooperation: all group members should cooperate unless others defect (i.e., refuse to cooperate). This argument was tested by Fehr and Fischbacher (2004) in a study in which there were two players together, each of whom had to decide at the same time whether to be cooperative (i.e., contribute money to a group project) or to defect (i.e., contribute nothing). The experimenter then multiplied the total amount allocated and divided it equally between the two players. A third participant decided whether to punish one or both players by reducing the money they received. This participant was far more likely to punish defectors than cooperators, and especially defectors paired with a cooperator (see figure on the right). This provides strong evidence for the social norm of conditional cooperation, because those who broke that norm were far and away the ones most likely to be punished.



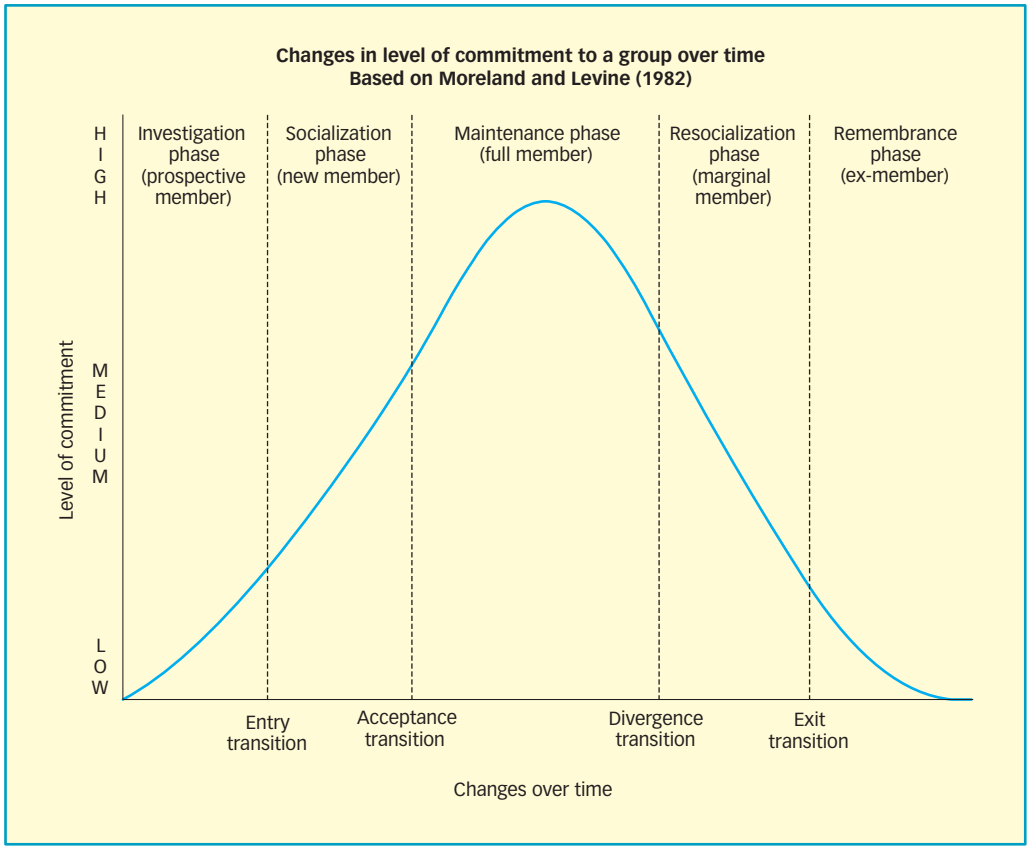
Percentage of third parties punishing defectors and cooperators in the Prisoners' Dilemma as a function of whether the partners of the defector/cooperator defected or cooperated. Based on data in Fehr and Fischbacher (2004).

There are cross-cultural differences with respect to many norms. Shweder, Mahapatra, and Miller (1990) asked Indian and American children and adults to assess the perceived seriousness of 39 norm-breaking actions. There was little agreement between inhabitants of the two countries. For example, Indian children regarded the following as very serious norm-breaking actions: "The day after his father's death, the eldest son had a haircut and ate chicken"; "A widow in your community eats fish two or three times a week."

DYNAMIC CHANGES

Most groups undergo dynamic changes as some people join the group and others leave it. Moreland and Levine (1982) put forward an influential theoretical approach to understanding group changes over time. They emphasized group socialization, which is concerned with the relationships between a group and its members. There are three key features of the theory (see the figure below). First, individuals' level of commitment to the group varies over time. Second, there are role transitions, in which the relationship between the individual and the group changes. Third, and related to role transitions, there are five phases of group socialization:

1. *Investigation phase*: Prospective group members assess whether they would like to join the group, and the group decides whether to accept them. After acceptance, there is the role transition of entry into the group.
2. *Socialization phase*: The group teaches new members about its norms and goals, and new members try to change the group to suit themselves. If this phase is completed successfully, it leads to the role transition of group acceptance.
3. *Maintenance phase*. Members engage in role negotiation. Members unhappy with their role in the group may produce a partial split from the group (this is known as divergence).
4. *Resocialization phase*. Divergence is sometimes followed by attempts to bring the member back fully into the group. If such attempts fail, then exit becomes the next role transition.
5. *Remembrance phase*. After the member has left the group, there may be occasions on which happy memories of group membership are recalled.



Moreland (1985) carried out a study in which five-person groups met once a week for 3 weeks to discuss topical issues. All of the members were actually new to the group but two members of each group (experimental participants) were told incorrectly that the other three group members (control participants) had already met together on two previous occasions.

Several of Moreland's (1985) findings were consistent with predictions from Moreland and Levine's (1982) theory. First, the experimental participants became more committed to the group over time. Second, the experimental participants gradually came to regard everyone as a full member of the group. Third, the tendency for experimental participants to behave more favorably to the other experimental participant than to the control participants diminished over time.

According to the theory, group members become increasingly committed to the group during the initial stages of group membership. It follows that relatively new group members should claim to be more influenced by group norms than those who have been members for longer. Jetten, Hornsey, and Adarves-Yorno (2006) confirmed this prediction in several experiments when group members were addressing an ingroup audience. However, there was no difference between new and more established group members in reported conformity to group norms when addressing an outgroup. New group members probably claimed to be conformist because it strengthened their position in the group rather than because that is what they really believed.

The theory fully acknowledges the fact that group members and groups systematically influence each other, but is limited in its applicability. As Levine, Moreland, and Ryan (1998, p. 285) admitted, the theory "is meant to apply primarily to small, autonomous [independent], voluntary groups, whose members interact on a regular basis, have affective ties with one another, share a common frame of reference, and are behaviorally interdependent."

GROUP DECISION MAKING

How do you think decision making differs between individuals and groups? Many people think groups are more cautious, basing their decisions on a consensus of the views of all (or most) group members. In fact, what often happens is **group polarization**, which "occurs when the group's initial average position becomes more extreme following group interaction" (Smith & Mackie, 2000, p. 346). Smith and Bond (1998) reported that group polarization had been found in seven countries including the United States. However, it had not been found in studies carried out in Liberia, Taiwan, Uganda, or Germany.

Most research in this area is limited. The great majority of studies have used groups without appointed leaders consisting of college or university students who don't know each other beforehand. In addition, the decisions that were made rarely had any genuine consequences for the groups concerned. Thus, the extent to which group polarization is a phenomenon applying to real groups making real decisions is not entirely clear.

What factors influence group polarization? One important factor is social comparison (Sanders & Baron, 1977). Individuals want to be positively evaluated by other group members. If they see other group members endorsing positions closer to some socially valued goal than their own, they will change their position toward that goal. Isenberg (1986) carried out a meta-analysis of 33 studies on group polarization. Social comparison had a reasonably strong effect on group polarization, especially when value- or emotion-laden issues were discussed rather than factual issues.

Another important factor is persuasive arguments. Suppose that most members of a group initially favor a given type of decision. During the discussion, individuals are likely to hear new arguments supporting their own position (Larson, Foster-Fishman, & Keys, 1994). As a result, their views are likely to become more extreme. Isenberg (1986) found in a meta-analysis that persuasive arguments had a powerful overall effect on group polarization. However, the effects were much stronger when the groups discussed factual rather than emotional or value-laden issues.

Key Term

Group polarization: the tendency for groups to produce fairly extreme decisions.

Self-categorization theory

According to social identity theory (discussed in Chapters 17 and 20), our identity is determined in large part by the groups to which we belong (known as ingroups). This

theoretical approach has been developed into self-categorization theory (e.g., Turner, 1987), according to which members of an ingroup often want to distinguish their group from other groups. They can do this by *differentiating* themselves from the views of an outgroup by adopting relatively extreme views themselves. This is achieved by finding the viewpoint that best represents the combination of what the ingroup members have in common *and* what most clearly distinguishes the ingroup from an outgroup.

Mackie and Cooper (1984) found evidence for the roles played by ingroups and outgroups. Student participants listened to a tape on which the members of another group argued either that standardized tests for university entry should be retained or that such tests should be abandoned. The group on the tape was identified as an ingroup or an outgroup. As expected, an ingroup had much stronger effects than an outgroup in altering the views of the group listening to the tape, and so produced far more group polarization. Changes in views among those listening to the tape produced by the outgroup tended to be in the *opposite* direction to the one advocated by that group. That is as predicted by self-categorization theory.

Several studies have provided more detailed support for the theory. Hogg, Turner, and Davidson (1990) found that groups became more cautious after confrontation with a riskier outgroup. In contrast, they became riskier after confrontation with a more cautious outgroup.

Evaluation

- (+) Group polarization is an important phenomenon that has been found in several countries.
- (+) Several factors (e.g., persuasive arguments; social comparison; self-categorization) influencing group polarization have been identified.
- (−) Most studies are artificial and limited, being concerned with groups of strangers making decisions having no real consequences.
- (−) As yet, we lack a comprehensive theory specifying the roles of persuasive arguments, social comparison, and self-categorization in producing group polarization.

Groupthink

The processes within groups leading to group polarization can sometimes have very damaging consequences. This is especially so when groups succumb to an extreme form of group polarization known as groupthink. **Groupthink** (a term introduced by Janis, 1972, 1982) is "a mode of thinking in which the desire to reach unanimous agreement overrides the motivation to adopt proper rational decision-making procedures" (Hogg & Vaughan, 2005, p. 339).

The tragedy of the space shuttle *Challenger* is an example of groupthink. Several engineers had warned it could be dangerous to launch this space shuttle in cold temperatures. The reason was that the cold might cause the O-ring seals in the rocket boosters to fail, thus causing a catastrophic explosion. On the morning of January 28, 1986, the temperature was below freezing. However, there was much public interest in the launch of *Challenger*—it was the first time an ordinary member of the public (a teacher called Christa McAuliffe) had travelled in space. NASA proceeded with the launch, and the *Challenger* exploded 73 seconds after liftoff, killing all seven people on board. The explosion was probably caused by failure of the O-ring seals.

What causes groupthink? According to Janis (1982), five features are typically present:

1. The group is very cohesive.
2. The group considers only a few options.
3. The group is insulated from information coming from outside the group.
4. There is much stress because of great time pressure.
5. The group is dominated by a very directive leader.

Key Term

Groupthink: an excess focus on consensus that typically produces poor group decisions.

The above five factors can produce an illusion of group invulnerability, in which the group members are very confident of their decision-making ability.

Tetlock et al. (1992) considered in detail eight of the cases used by Janis (1982) to support his groupthink theory. They agreed with Janis that groups showing groupthink typically had a strong leader and a high level of conformity. However, contrary to Janis's theory, groups showing groupthink were generally less (rather than more) cohesive than other groups. In addition, the evidence didn't indicate that exposure to stressful circumstances contributed to the development of groupthink.

Kramer (1998) argued that many well-known faulty decisions were influenced at least as much by political considerations as by deficient group processes. For example, the *Challenger* disaster owed much to the fact that NASA was very keen to attract positive publicity to maintain its government funding. If NASA had decided not to proceed with the launch, there might have been accusations of incompetence.

There is another major limitation with many alleged cases of groupthink. Much of the information about what actually happened (e.g., the launch of the *Challenger*) is based on the recollections of those involved. Many of them may have had deliberately distorted recollections, claiming for example to have been much more opposed to the decision than they were.

Janis (1972, 1982) argued in favor of vigilant decision making, in which there is critical appraisal and open discussion of the options. Supporting evidence was reported by Peterson, Owens, Tetlock, Fan, and Martorana (1998). They studied top management teams during a time when the team was successful and a time when it was unsuccessful. Symptoms of vigilant decision making were generally present during the successful time and symptoms of groupthink during the unsuccessful time. However, as Peterson et al. (1998, p. 272) concluded, "Successful groups showed some indicators of groupthink, whereas unsuccessful groups showed signs of vigilance."

Case Study: *Groupthink*

Conformity to group opinion has many important applications, such as in juries and in the management committees of large organizations. The way individuals behave in these groups is likely to matter a lot. Janis (1972) coined the term "groupthink" to describe how the thinking of people in these situations is often disastrously affected by conformity. Janis was describing the "Bay of Pigs" disaster to his teenage daughter and she challenged him, as a psychologist, to be able to explain why such experts could make such poor decisions. (The Bay of Pigs invasion took place in 1961. President Kennedy and a group of government advisors made a series of bad decisions that resulted in this extremely unsuccessful invasion of the Bay of Pigs in Cuba—disastrous because 1000 men from the invasion force were only released after a ransom payment of 53 million dollars' worth of food and medicine, and also because ultimately the invasion resulted in the Cuban missile crisis and a threat of nuclear war.) Janis suggested that there are a number of group factors that tend to increase conformity and result in bad decision making.

- *Group factors*. People in groups want to be liked and therefore tend to do things to be accepted as one of the group.
- *Decisional stress*. A group feels under pressure to reach a decision. To reduce this sense of pressure they try to reach the decision quickly and with little argument.
- *Isolation*. Groups often work in isolation, which means there are no challenges to the way they are thinking.
- *Institutional factors*. Often people who are appointed to higher positions are those who tend to conform, following the principle that a good soldier makes a good commander.
- *Leadership*. The group is led by a strong leader who has clear ideas about what he/she wants the group to do.

Evaluation

- (+) Groupthink has been demonstrated in several contexts and countries.
- (+) As Janis predicted, factors such as a strong leader and pressures toward conformity increase the likelihood of groupthink.
- (−) Janis was wrong to assume that a high level of cohesiveness is needed for groupthink. Exposure to threatening circumstances is also less important than he claimed.
- (−) There are few laboratory studies in which all of the factors allegedly involved in producing groupthink have been manipulated.
- (−) Janis minimized the importance of political factors in producing groupthink.