

Making sense of ourselves



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Introduction

This free course introduces you to some well-known psychological topics by asking and answering some important everyday questions such as:

- Why don't we like one another?
- Why would I hang around with you?
- Do you see what I see?
- And what's the point of childhood?

As you work your way through the course you will learn how psychologists go about addressing these questions using different research tools and approaches.

The course is divided into four separate sessions that will introduce you to four of the topic weeks on the level 2 Psychology course DE200 *Investigating psychology 2*. Each session will address one of the everyday questions mentioned above and will introduce you to some of the answers that psychologists have provided. As you explore these four questions, you will get some sense of how diverse psychological research is not just in terms of the topics of interest to psychologists but also in terms of the differing approaches and research methods that they use. The whole course will take about 4 hours to complete.

This OpenLearn course is an adapted extract from the Open University course [DE200 *Investigating psychology 2*](#).

Learning Outcomes

After studying this course, you should be able to:

- explain some of the key aspects of prejudice and how and why they are important
- describe basic elements in the study of the psychology of personal relationships such as love and friendship
- understand how visual illusions are used to explore the visual system and how psychologists research vision
- understand the role of theory of mind in researching child development.

1 Why don't we like one another?

In this section you will be introduced to the psychology of **prejudice**, through which psychologists have addressed the everyday question of why we don't like one another. Prejudice can be defined as a negative evaluation of members of other social groups and it is of interest to psychologists because the negative thoughts and feelings that arise from prejudice contribute to real world social problems such as racial and gender discrimination.

Psychologists have generated a number of explanations for why people become prejudiced and in this section you will undertake some online activities that focus on **'implicit and explicit' forms of prejudice** and the distinctions between them.

1.1 Explicit and implicit prejudice

Some research evidence suggests that levels of racial prejudice are changing in modern, Western societies. Consider, for example, Figure 1 below, which presents evidence on white Americans' levels of agreement with negative stereotypes about black Americans at three points in time. What does this figure show? What kind of historical changes does it convey?

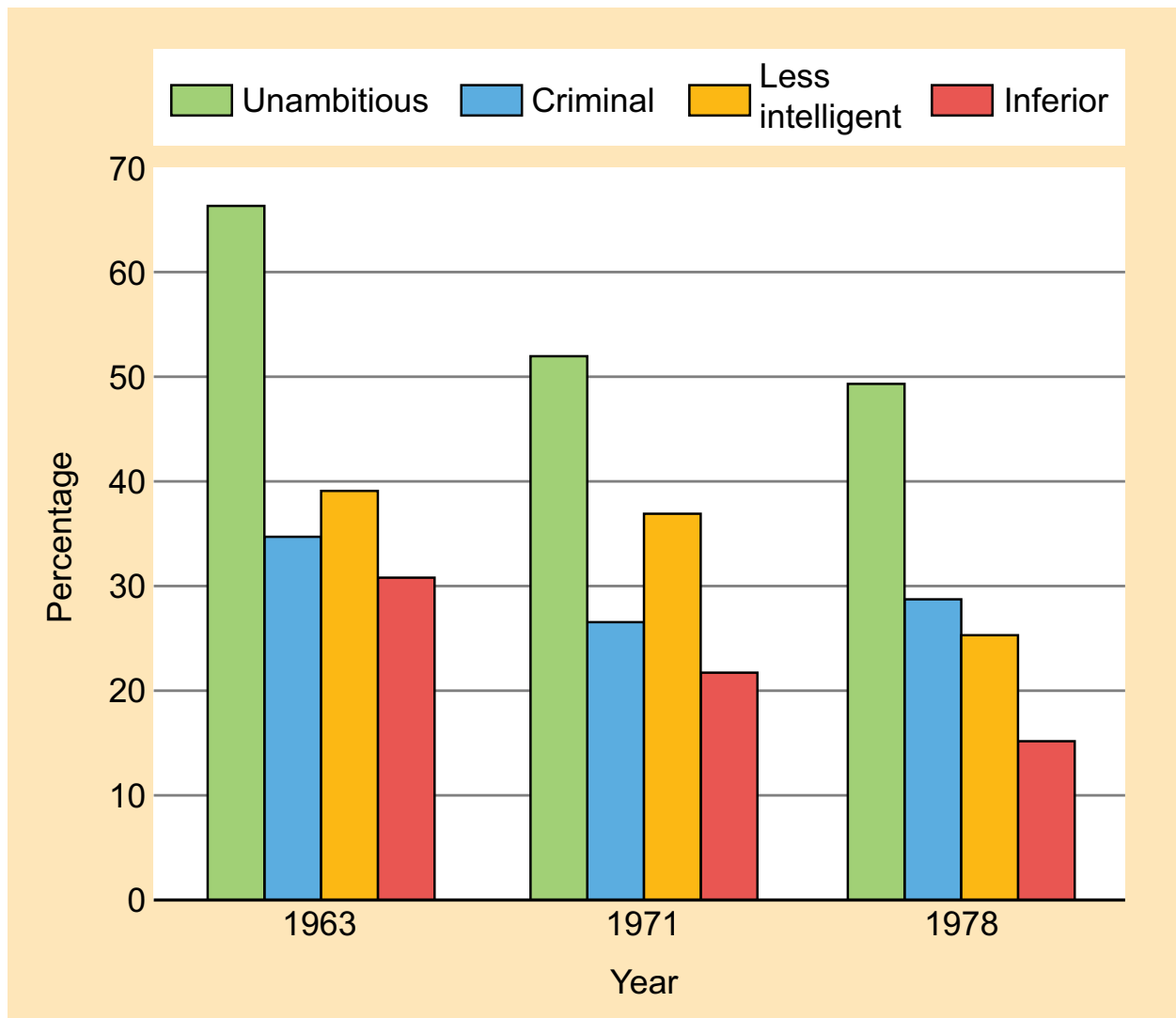


Figure 1 Historical shifts in whites' racial stereotypes towards blacks

(Dovidio and Gaertner, 1986, pp. 91-125)

This figure can be interpreted in a number of ways. First, it shows that white Americans agree with some racial stereotypes (e.g. that black Americans are 'unambitious') more than others (e.g. that black Americans are 'less intelligent'). It also shows that stereotyping has decreased over time across all four stereotype measures. For example, in 1963 about 30 % of white Americans felt that black Americans were 'inferior', but by 1978 roughly half as many held this stereotype.

One interpretation of this evidence is that it proves that Americans are becoming more racially tolerant. The fact that a decline is evidenced on all of the stereotype scales in Figure 1 is grounds for optimism.

Many psychologists, however, are cautious about jumping to this conclusion. Among other reservations, they have highlighted the limitations of the self-report measures of prejudice used here, i.e. measures in which people are asked to report on their own negative beliefs about members of other groups.

Should they be cautious? What are the potential limitations of this kind of measure of prejudice?

1.2 Potential limitations of self-report measures of prejudice

One potential limitation is that self-report measures are particularly vulnerable to what psychologists call social desirability effects. We all know, for example, that it is 'wrong' to be prejudiced towards others. Agreeing with the race stereotypes presented in Figure 1 might thus lead others to see us in a negative light. This may create a pressure to respond to these scales in ways that convey a more positive, socially desirable, self-image.

Given that the moral norm against expressing prejudice has become stronger over the past decades, the historical changes indicated in Figure 1 may simply reflect changes in people's surface expressions of stereotyping rather than changes in their actual underlying beliefs about others. In other words, they may reflect the faking rather than fading of prejudiced responses.

In order to illustrate this point, you will find below a shortened version of a widely used explicit measure of prejudice, called the modern racism scale, which you are invited to complete. It has been adapted for use here (adapted from McConahay, cited in Dovidio and Gaertner, 1986, pp. 91-125).

(Please note that this exercise is simply designed to give you some practical experience of different methods psychologists use to measure prejudice and that your performance on these tasks is completely confidential and will not be stored or used for any other purpose.)

Activity 1 Explicit and implicit attitudes towards others

This first short reading and activity will take about 40 minutes to complete.

This activity is designed to explore the distinction between explicit prejudice and implicit prejudice. It is also designed to give you practical experience of methods designed to measure implicit prejudice.

Indicate the degree to which you agree with the statements below by selecting the number from the following scale that best matches your own opinion.

Interactive content is not available in this format.

How did you respond to these items?

We guaranteed that your responses would be kept strictly anonymous (and they will). Would you have performed differently on this questionnaire if you believed they would be made public? If so, why?

These kinds of questions orient to the problem of 'social desirability'. It is very easy to work out that high scores on this scale indicate high levels of 'prejudice'. In turn, it is easy for individuals to fill in this questionnaire in ways that present a 'positive' image of themselves as unprejudiced. More subtly, this pressure to act in a socially desirable way may vary across different social contexts. We tend to be most concerned about 'looking good', for example, when we know our responses might be seen by others or could cause offence.

1.3 Tackling social desirability

Not all prejudice measures, however, rely on self-reports and not all measures are equally vulnerable to social desirability pressures. In recent years, psychologists have increasingly distinguished between two kinds of measures of prejudice:

- **Implicit measures** are less obtrusive, focusing on responses that are more subtle, spontaneous and difficult to control. They tend to be less affected by social desirability concerns.
- **Explicit measures** focus on overt, consciously expressed feelings and beliefs. Responses on such measures are easy to control. They tend to be affected most by social desirability concerns.

The distinction between implicit and explicit measures of prejudice is arguably not best conceived in an 'either/or' fashion. The measures are probably better conceived as falling along a continuum.

The figure below presents a continuum of implicit-explicit measures of prejudice. At one pole, we have measures of 'open discrimination' such as observations of crude, racist or sexist language and behaviour. At the other pole, we have measures of physiological responses to members of other groups. These might include, for example, neurological indicators of disgust or threat of which a person is entirely unaware (e.g. evidence of activation of the 'fear centre' or amygdala in the brain). Between these two extremes fall other measures on this continuum.

Place your cursor over a particular measure and click to see a brief description of each section of the diagram below.

Interactive content is not available in this format.

[Figure 2 A continuum of implicit–explicit measures of prejudice](#)

At this point, you might want to think about why a given measure has been located on a particular point of the continuum between 'explicit/easy to control' and 'implicit/difficult to control'. (Of course, there are no absolute rules about where a measure should fall.)

1.4 The activation of racial attitudes

You will now be introduced to a method for studying prejudice that can be placed close to the 'implicit/difficult to control' pole of this continuum. The following activity is roughly based on a classic study originally conducted by Russell Fazio and his colleagues in 1995 (though it has been simplified and his methodology adapted). The study uses reaction time measures to access deep-seated association between race and implicit attitudes.

Activity 2 The automatic activation of racial attitudes

This task requires you to complete what social psychologists call a 'priming task' which is designed to explore the association between racial stimuli and positive and negative words.

(Please note that this exercise is simply designed to give you some practical experience of different methods psychologists use to measure prejudice. Your

performance on these tasks is completely confidential and will not be stored or used for any other purpose.)

The following task has a number of phases. Follow the instructions in the box and work through each phase in turn.

Interactive content is not available in this format.

Discussion

The tasks you have just completed were part of a classic series of studies which have been greatly simplified for the teaching purposes here. The study was conducted by Russell Fazio and colleagues and published in 1995 in the *Journal of Personality and Social Psychology*.

As you will have guessed, Fazio and colleagues were not really interested in the ability to classify words or remember faces. Their analysis focused on Phase 4 of the task in which participants were asked to classify – as quickly and accurately as possible – specific words as having positive or negative meanings (e.g. 'attractive' or 'disgusting'), having just been exposed to a photograph of either a white or a black male face.

Take a look at the following figure which represents some of Fazio et al.'s main findings. As you can see, white participants in the study tended to classify positive words more quickly (in milliseconds) if they were preceded by exposure to a white face 'prime' than they did when such words were preceded by a black face prime. Similarly, white participants tended to classify negative words more quickly when preceded by a black, rather than a white, face prime. Note that the term 'prime' here simply refers to anything that gets people to think about the racial categories of 'white' or 'black'.

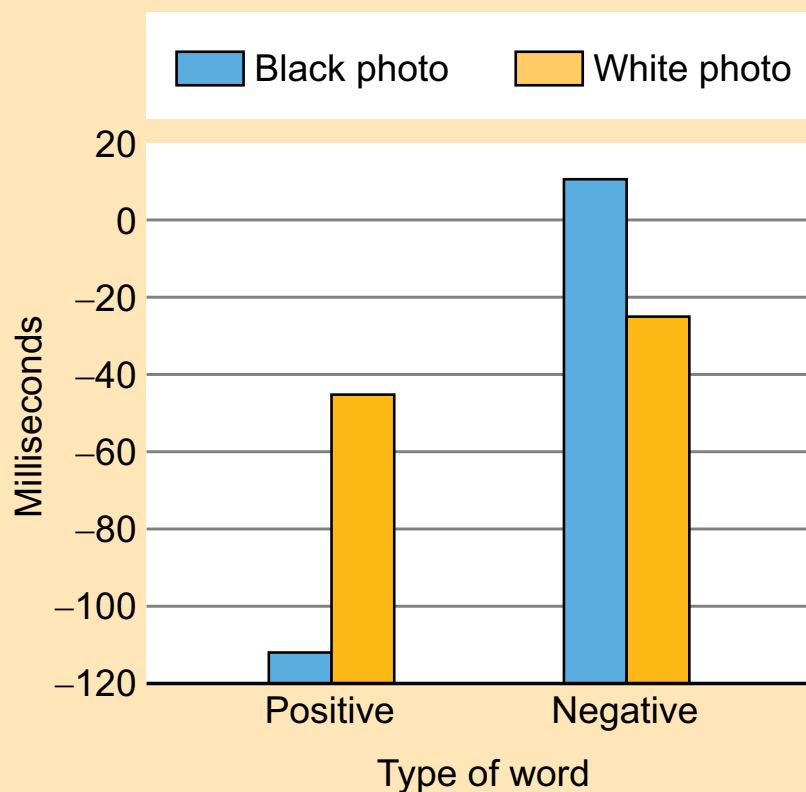


Figure 3 Mean facilitation scores for positive and negative attitudes preceded by photographs of white and black faces

Why might this pattern of results be of interest to prejudice researchers?

1.5 Interpreting the findings

Why might this pattern of results be of interest to prejudice researchers?

Looking at Fazio et al.'s findings, it could be argued that they show that white Americans have deep-seated, automatic, negative associations with the category 'Black Americans'. These associations facilitate (thus speed up) the classification of negative words, but interfere with (thus slow down) the classification of positive words. In other words, reaction times indicate implicit prejudices that emerge in ways that individuals find difficult to control; in fact, individuals are often unaware of the degree to which they harbour such prejudices.

But is this really prejudice?

Implicit measures of prejudice are controversial. Some researchers have argued that the subtle negative associations measured by research such as Fazio et al.'s (1995) study are not the same thing as the overt negative feelings and beliefs studied in traditional prejudice research. Critics, such as Hal Arkes and Philip Tetlock have argued, for example, that implicit measures set the 'bar too low' and that the negative associations tapped by reaction time measures fall well short of bona fide prejudice. For example, such associations may reflect shared cultural knowledge of such associations rather than an individual's personal feelings or beliefs. Alternatively, it may show bias in favour of certain

groups without necessarily showing prejudice against others. In other words, '... relative difference in RT [reaction time] between two target sets does not necessarily imply hostility or prejudice toward either group.' (Arkes and Tetlock, 2004, p. 267).

Countering this argument, other researchers have pointed out that implicit prejudice measures are often good predictors of other negative behaviours towards minority groups, strengthening confidence in their validity. In Fazio et al.'s (1995) study, for example, participants who had high scores on the implicit prejudice task, similar to the one you have just completed, later behaved in a less friendly fashion during an interaction with a black experimenter.

It is also noted that such measures overcome many of the limitations of explicit prejudice measures, notably the problem of social desirability. Because these measures tap responses that are automatic and difficult to control, such responses are far more difficult to fake.

It is worth noting, in conclusion, that although implicit prejudices are more difficult for individuals to control, we should not assume that they cannot be changed.

2 Why would I hang around with you?

This second section introduces you to a popular area in psychology – that of **personal relationships** and the consideration of the everyday question: 'Why would I hang around with you?' In looking at personal relationships the focus will be on those that are both voluntary and reciprocal; in other words, relationships that we choose to engage in and are based on mutual attraction. Both **love** and **friendship** fall into these categories of personal relationship. Psychologists are very interested in these types of relationships because they have the capacity to satisfy many of the social and psychological needs of the parties involved. These types of personal relationships have a life cycle and research has been undertaken that follows this life cycle from beginning to end and considers some of the key characteristics such as attraction, communication and self-disclosure, friendship, love, conflict and violence, relationship dissolution, and loneliness.

2.1 Enduring love?

This activity probes some of the traditional understandings that underpin key psychological theories about personal relationships. It focuses on the findings of *Enduring Love?* – a research project conducted by Janet Fink and Jacqui Gabb of The Open University – which asked people about their experience of relationships.

Activity 3 How much do I love thee?

This activity will take about an hour.

Take a look at this video, which features Janet Fink and Jacqui Gabb talking about the *Enduring Love?* project. Start by watching the whole film without interruption and try to follow the main discussion.

Video content is not available in this format.

[Video 1 Interview with Janet Fink and Jacqui Gabb](#)



Now that you have seen the film once, read through the questions below and watch the film again with these specific issues in mind. Feel free to stop and rewind the film whenever you like, and note down some of the key points.

- 1 Hazan and Shaver's (1987) described romantic love as 'a biological process designed by evolution to facilitate attachment between adult sexual partners who, at the time love evolved, were likely to become parents of an infant who would need their reliable care'. How does this compare with the findings of the *Enduring Love?* project?
- 2 What did the *Enduring Love?* research have to say about the relationship between love and friendship?
- 3 Were the researchers able to establish characteristics that potentially make love enduring?
- 4 Spend a few minutes thinking about your perspective on this project. Where you surprised by any of the findings? What do you think was the key contribution?

3 Do you see what I see?

This section provides you with the chance to investigate the visual system and **visual perception** exploring both the biology of the visual system and theories that have been put forward to explain how people perceive the visual world. The materials presented here question how our perception of the world can be altered due to shortcuts taken by our brain, which in turn alters our experience of the visual world. Research on the human visual system has demonstrated how our eyes and brain need to work together to make sense of the world and other senses also need to work together with our visual system in order to interpret our surroundings accurately.

3.1 What do visual illusions tell us about how we

process information?

Our visual and perceptual systems work together to help us to make sense of our surroundings. Visual illusions allow us to investigate how the two systems work together and also to highlight how some of the cortical shortcuts taken can lead to an altered perception of a stimulus.

In the four parts of this activity you will get the chance to try out a few illusions before considering the underlying processes that they reveal.

Activity 4 Visual illusion of context

This activity will take about one hour.

Some illusions inform us of the effect of context and surroundings on visual processing. In the example below, participants are asked to judge which circle is darker in colour. The circles in the centre of each of the squares appear to be different in colour: the circle on the left appears lighter than the circle on the right.

Now click on either of the arrows in the figure to remove the coloured surrounds. As you can see, both circles are the same colour.

Interactive content is not available in this format.

Why might this be the case? Note down what you think might cause this illusion, or any thoughts you have on your experience of it.

Provide your answer...

Discussion

Now click on either of the arrows in the figure to remove the coloured surrounds. As you can see, both circles are the same colour. Your perception in this case is affected by the colour of the surrounding shapes. The circle on the left is surrounded by a darker colour (blue) which makes us perceive it as being lighter. The circle on the right is surrounded by a lighter colour (pink) which makes us perceive it as being darker. When placed next to one another and compared, these context effects come into play and the colours of the circles appear different. When the surrounding colours (the context) are removed, the circles are revealed to be identical in colour.

3.2 Adelson's checkerboard illusion

A further, classic example of the impact of context and surrounding is Adelson's checkerboard

Activity 5 Adelson's checkerboard illusion

In this example, you are asked which square is darker: A or B?

Interactive content is not available in this format.

Square A seems to be darker than square B. Why might this be the case? Note down what you think might cause this illusion, or any thoughts you have on your experience of it.

Provide your answer...

Discussion

Now click on the arrow to reveal the answer. This illusion makes use of two effects: context/surroundings and shadow. As with the previous example, we assume that square A is darker as it is surrounded by lighter squares. Similarly, square B is surrounded by darker squares, making it appear lighter. However, the shadow cast by the green cylinder makes colour judgements based on luminance (the light coming from a surface) more difficult. Our visual system accounts for this, and we assume that square B may appear slightly darker than it is, because it is cast in shadow. However, equally, our visual system is more alert to more obvious, hard-line changes in colour (as demonstrated by the checkerboard, where individual squares are easily picked out) and less so to gradual colour changes (as demonstrated by shadow). For these combined reasons, participants generally claim that square A is darker than square B, whereas in fact they are the same shade of grey.

3.3 Rotating snakes illusion

Visual illusions demonstrate the differences between peripheral and foveal vision. In this 'rotating snakes' example, the circles appear to be moving. In fact, this is just a static image. If you fixate on the centre of one of the circles, it will stop moving.

Activity 6 Rotating snakes illusion

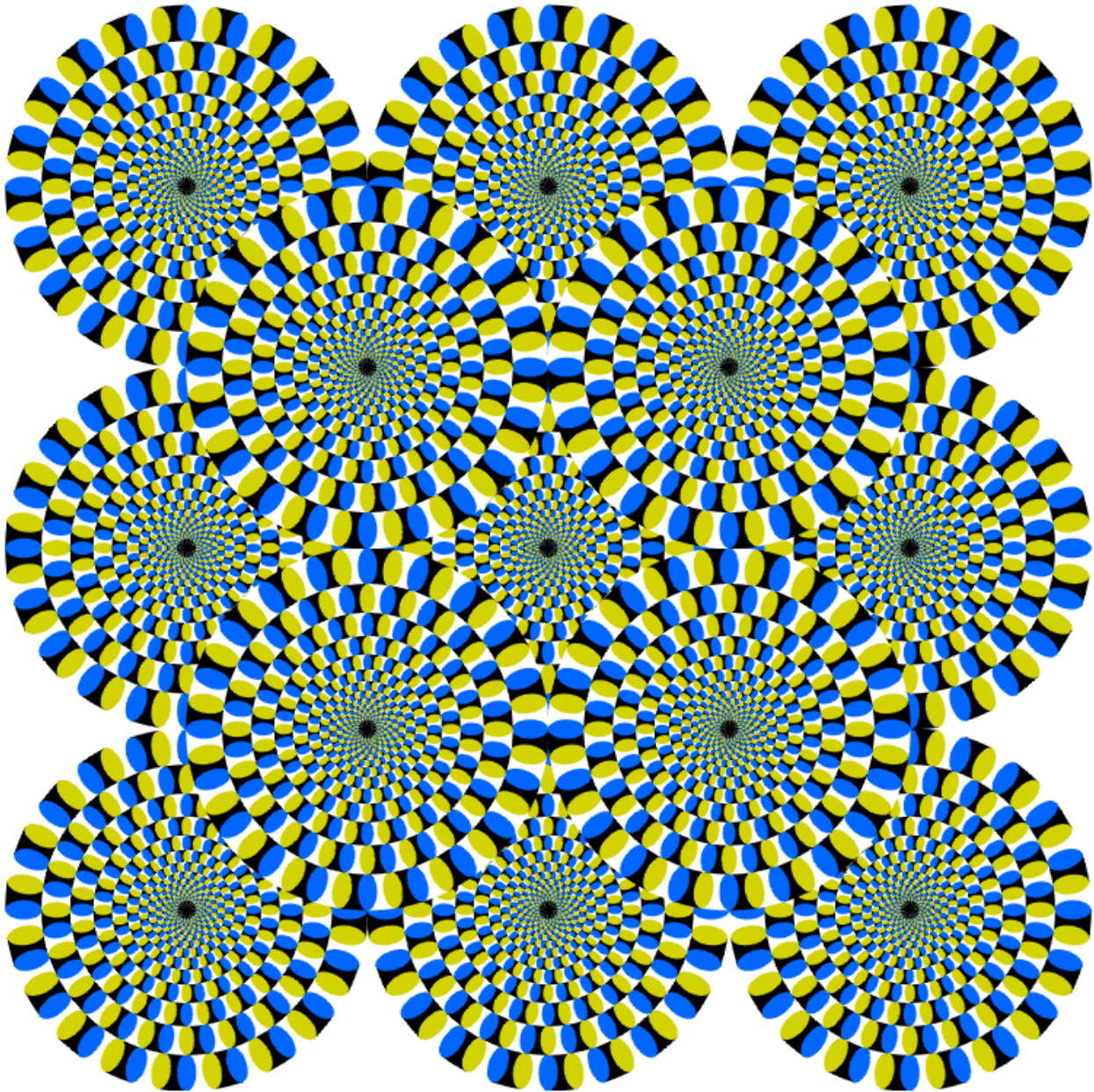


Figure 4 Rotating snakes illusion

Why might this be the case? Note down what you think might cause this illusion, or any thoughts you have on your experience of it.

Provide your answer...

Discussion

When you view the image, your peripheral vision produces the sensation of movement. When you fixate, and use foveal vision, the motion stops. Our peripheral visual fields are specialised for motion detection, whereas our central (foveal) vision is specialised for colour and detail. The direction that the wheels move in, and the strength of the effect, are dependent on the background luminance. When presented on a bright white background, the wheels appear to move more slowly than when

presented on a grey background. The motion experienced by most people viewing this example is believed to come from the arrangement of the components of the 'snakes'. These cause asymmetric luminance steps, which in turn trigger motion detectors, allowing us to perceive the static image as moving.

3.4 Spiral after-effect illusion

Finally, interesting effects can be demonstrated by moving examples.

Activity 7 Spiral after-effect illusion

Play the video below and fixate on the centre of the spiral for 20 seconds. After this time look at the back of your hand. What happens?

Video content is not available in this format.

[Video 2](#)



Why might this be the case? Note down what you think might cause this illusion, or any thoughts you have on your experience of it.

Provide your answer...

Discussion

This is a demonstration of the motion after-effect. When you look at the back of your hand, or any other static object, after having been exposed to this spiral, it appears that the new object is moving in the opposite direction to the spiral. This is explained by adaptation of the neurons encoding movement in that particular direction. We have specific neurons specialised for detection of movement in different directions, and activity of these neurons is usually well balanced. When exposed to this example, those neurons that are activated by the motion in the spiral become fatigued and the balance of activity of other neurons is shifted in favour of those that are specialised for movement in the opposite direction to the spiral. Therefore, we experience motion

where there is none, and the static object we have focused our eyes on appears to be moving in the opposite direction to the spiral.

3.5 What does this tell us about perception?

These examples demonstrate how our visual system is highly evolved to help us make sense of the world. Rather than us having to take in an image and consciously analyse it for meaning, we are able to glance at a scene and derive an understanding of it very quickly. While it could appear that visual illusions demonstrate how easily our brains can be tricked, in fact they reveal how efficient we are at processing information and how automatic shortcuts in processing increase this efficiency. The combination of prior knowledge, experience and context assist and develop these shortcuts, without which we would struggle to make sense of some visual scenes while being overloaded with processing demands.

However, our understanding of the visual system has advanced greatly over the last 40 years, allowing us to appreciate that vision is just once piece of the puzzle in explaining how we process and understand the information taken in by our eyes.

4 What's the point of childhood?

The focus of this final section is on developmental psychology and early childhood. Psychologists interested in 'childhood' have explored the factors and processes that shape development and allow us to function in the wider social context as we grow. One of the key purposes of childhood is to develop social capabilities in order to be able to function effectively in the wider social context.

4.1 Becoming social: how children learn to read others' minds

The development of **theory of mind** is an important part of this allowing the child to understand others and social interaction. In this section you will undertake an activity to explore how children develop this ability and how psychologists study and measure **theory of mind**.

Activity 8 'Reading the mind in the eyes' test

Look at Figures 5(a)–(d) below. For each pair of eyes, select the emotion that the person photographed is most likely to be feeling.



Figure 5(a)

Source: Taken from Baron-Cohen et al. (1997, p. 816–17)

1. Does picture 5(a) depict a playful or serious emotion?

- ☐ Playful
- ☐ Serious



Figure 5(b)

Source: Taken from Baron-Cohen et al. (1997, p. 816–17)

2. Does picture 5(b) depict a concerned or unconcerned emotion?

- ☐ Concerned
- ☐ Unconcerned



Figure 5(c)

Source: Taken from Baron-Cohen et al. (1997, p. 816–17)

3. Does picture 5(c) depict a sympathetic or unsympathetic emotion?

- ☐ Sympathetic
- ☐ Unsympathetic



Figure 5(d)

Source: Taken from Baron-Cohen et al. (1997, p. 816–17)

4. Does picture 5(d) depict a reflective or unreflective emotion?

- ☐ Reflective
- ☐ Unreflective

Discussion

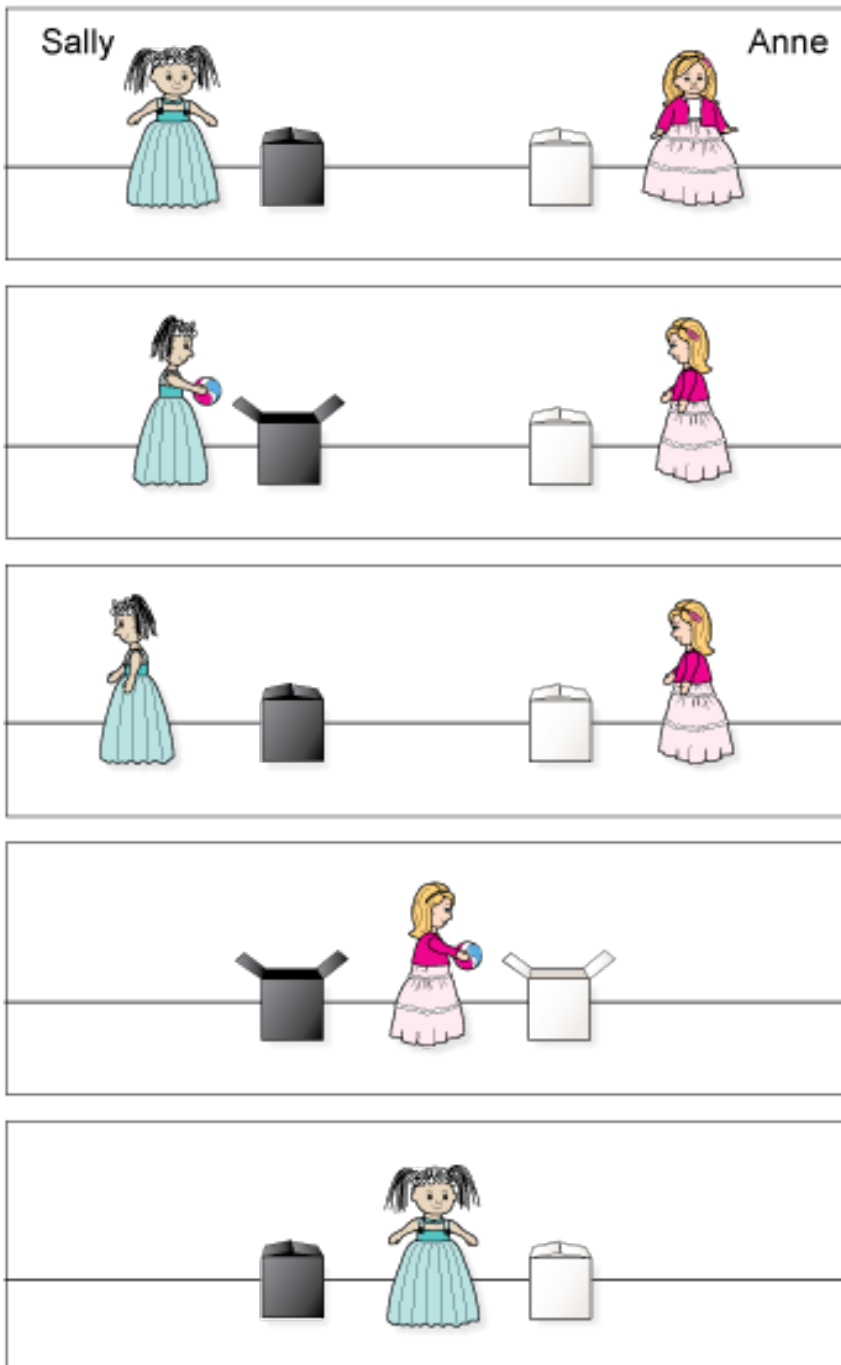
The task above, based on the work of Simon Baron-Cohen and colleagues (1997), is designed to measure relatively advanced (adult) levels of a cognitive ability that psychologists call theory of mind (ToM). ToM refers to the capacity of human beings to use information in order to 'read' what other people might be thinking or feeling in a given context. This may sound simple, however 'mind reading' involves a highly sophisticated range of cognitive skills, including the ability to take the spatial, social and emotional perspective of another person, to organise and evaluate contextual cues about what they might be thinking or feeling, and to decode subtle non-verbal behaviours. With no more information than a truncated picture of someone's eyes, for example, many of you will have successfully decoded the feelings of at least some of the people pictured above.

Although ToM is widely viewed as an innate, cross-culturally universal ability, children are not born with this ability fully formed. It is something that builds over time and gradually increases in sophistication as the child learns through interaction with others. Infants and young children, for example, would struggle to complete the task presented above (even if they understood the meaning of terms such as 'playful' and 'serious'). They have not yet learned how to decode the 'language of the eyes' (Baron-Cohen et al., 1997), which is one of the many skills that underpin ToM. In order to map the developmental trajectory of ToM in children, psychologists have had to devise other methods.

4.2 Studying ToM in young children

The most famous and widely used method for exploring ToM in children is called the Sally–Anne task (Figure 6). (It is sometimes also known as the Sally–Anne test or the Sally–Ann task/Sally–Ann test.) There are many variations of this task, but the classic

version runs as follows. The child is introduced to two dolls, Sally and Anne, and asked to recall their names. Next, he or she is told a short story in which Sally is said to hide a marble in her box and then leave the room. While she is out of the room, Anne removes this marble from Sally's box and puts it in her own box. Sally then re-enters the room. Having heard this story, the child is asked the critical question: 'Where will Sally look for her marble?'



Sally has a black box and Anne has a white box.

Sally has a marble. She puts the marble into her box.

Sally goes for a walk.

Anne takes the marble out of Sally's box and puts it into her box.

Sally comes back and wants to play with her marble. Where will Sally look for her marble?

Figure 6 The Sally–Anne task

Pause for thought

Why do you think the Sally–Anne task is sometimes also called a 'false beliefs task', and how might understanding false beliefs relate to children's ToM?

Do you think this task is effective in measuring ToM?

What might be some of its potential problems and weakness?

4.3 Alternative ToM tasks

Although it has been used in many studies, the Sally–Anne task – and similar false belief tasks – have been widely criticised in the field (e.g. Bloom and German, 2000). For example, the simple pass–fail scoring protocol does not allow for the possibility of more subtle differences in children's abilities. In addition, the Sally–Anne task requires levels of verbal comprehension, memory and other skills that younger children may not possess, and this, rather than a lack of ToM, may explain why they struggle to complete the task. Perhaps most importantly, the Sally–Anne task arguably focuses on only a narrow range of the complex skill set that allows us to read others' feelings, beliefs, intentions and behaviours in real-life social interactions (Figure 7).

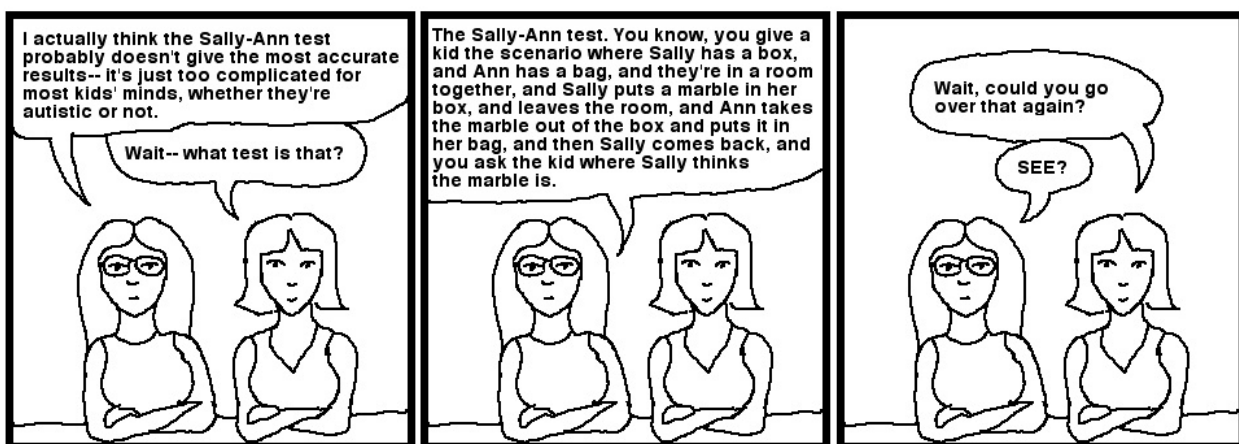


Figure 7 The limits of the Sally–Anne task/test

Such criticisms have led to the development of a host of alternative methods for exploring ToM. One example of this is using eye-tracking technology in order to explore the possibility that younger children have a partial understanding of ToM.

Another example of an alternative ToM task is based on a task battery developed by Tiffany Hutchins, Patricia Prelock and Wendy Chace (2008). Rather than a single false belief task with a simple right or wrong answer, this battery presents children with a series of tasks that tap varying aspects of their ability to 'mind read' and so yields a more nuanced score. The tasks are designed to vary in difficulty and to measure a wide range of skills and abilities associated with ToM dynamics as they are expressed in everyday settings.

Activity 9 Hutchins, Prelock and Chace's ToM task battery

An example of one of the more complex tasks in Hutchins, Prelock and Chace's ToM task battery is presented below.

Click on the forward arrow to begin the task. As you go through the slides, note down in the box below three skills or abilities that a child would need to have acquired in order to successfully complete the various elements of this task.

Interactive content is not available in this format.

As you note your answers, think about how the abilities or skills you have identified allow us to read others' minds and why this is believed to be such an important part of cognitive and social development.

Skill/ability 1:

Provide your answer...

Skill/ability 2:

Provide your answer...

Skill/ability 3:

Provide your answer...

Discussion

This task requires children to make judgements about peoples' beliefs, desires and intentions. These judgements about other minds can be more or less complex. For example, first-order mental states are simply thoughts of the form 'he thinks that ...', whereas second-order mental states take the form 'he thinks that she thinks'. For children to give the correct responses in this task, they need some basic competence in this latter kind of mental reasoning.

Underpinning this ability to make accurate judgements about others is a whole raft of other social and cognitive abilities. For example:

- the linguistic ability to understand words such as 'think', 'want', and 'feel'
- the ability to recognise different kinds of facial expressions and to link these expressions to underlying emotions
- the ability to recognise that people may be mistaken about what others believe.

As you can see, ToM is a complex and rich psychological phenomenon! Because of the range of abilities needed to complete this task successfully, it is important that these tasks are actually assessing ToM (validity) and not measuring something else (for example, linguistic skill or working memory). Even if we do not know fully why we are so good at predicting others' mental states, the majority of us are (though, of course, that doesn't mean we *always* get things right!).

Conclusion

This short course has explored four well known psychological topics – prejudice, personal relationships, visual perception and child development. As you worked your way through the four everyday questions that were posed around these topics you got an opportunity

to see how psychologists adopt different approaches and research methods to arrive at answers to these questions.

This OpenLearn course is an adapted extract from the level two Open University course [DE200 Investigating psychology 2](#). If you decide to study this course you will learn more about how psychologists have answered other everyday questions and the approaches and methods that they have used as you explore the four different, but overlapping, sub-disciplines of social, cognitive, biological and developmental psychology.

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Acknowledgements

This free course was written by the DE200 module team.

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