

4.1 Social learning theory

Time: 45 minutes

Resources: WS 4.1

The first exercise on WS 4.1 is a fill-in-the-blanks exercise to provide a summary of the principles of SLT, using appropriate terminology. It could be used as a revision exercise in class or as a test once the material has been covered. The second exercise asks for an evaluation — including both positive and negative points — of the Bobo doll studies, which can then be discussed in class.

Suggested answers:

- 1 As with classical and operant conditioning, SLT explains behaviour as the result of **learning**. It was developed by **Bandura** and uses the same idea of reinforcement as **operant** conditioning. However, learning comes about not as the result of the effects of our own behaviour, but by observing the behaviour of others and the **consequences** of this behaviour, i.e. **vicarious learning**. This process is called **observational learning**. If this behaviour has a positive outcome, i.e. if it is **reinforced**, we are more likely to behave in a similar way, i.e. to **model** the behaviour. Observing someone's behaviour being **reinforced** has a greater effect on our behaviour than seeing the behaviour being **punished**.

The three sources of models are: **family**, e.g. parents or older siblings; **subculture**, e.g. friends; **the media**, e.g. television programmes. The theory has triggered a lot of research into the effects of **the media**.

Unlike classical and operant conditioning, this theory has a **cognitive** element, since internal **mental processes** are taken into account. Modelling is not the same as **imitation**, as we do not automatically copy others' behaviour, but think about whether the behaviour we have observed is **appropriate** for us.

We are more likely to model the behaviour of those who are **similar** to us and who are seen as having **desirable characteristics**. The effects are more marked for people who have low **self-esteem**.

2 **Positive:**

- The studies do demonstrate aggressive behaviour.
- They are well controlled with a clear dependent variable (DV).
- The use of unusual ways of attacking the doll suggests that this was not the way the children might have interacted with the doll if they had not observed the model.

Negative:

- The ecological validity of showing children brief videos of adults behaving in unusual ways is questionable. For example, children's attention will be focused on the model's behaviour, which may be unlike the situation when they watch television or videos at home.
- The studies do not demonstrate aggression against a human being, so it could be unwise to generalise beyond the situation.
- The studies are limited in only using adult models, i.e. powerful people, so we do not know how children might react to other children behaving in this way.
- Demand characteristics might be a feature — because of the experimental set-up, children might have thought that they were expected to imitate the adult.
- The studies may not represent a valid test, since there does not seem to be any other obvious way of interacting with a Bobo doll.
- The ethics of encouraging children to be aggressive are questionable.

4.2 Deindividuation

Time: 30 minutes

This activity introduces students to the concept of deindividuation. You will need a blank sheet of paper for each student and a box to put the papers in when completed. Hand out a sheet of paper to each student and ask them to carry out the task individually without consulting each other. Say to them:

'If you could be totally invisible for 24 hours and were completely assured that you would not be detected or held responsible for your actions, what would you do?'

Ask students to write down their responses, as many as they like, but not to write their names on the paper. Tell them that when they have finished, all the sheets of paper will be folded into four in the same way, put into a box and shuffled before any are drawn out, so it will be impossible to identify who has written a particular sheet. When students have finished, they should fold their sheets into four, put them in the box and shuffle them. Draw them out and read them to the class, making a note of how many responses could be considered antisocial. This is an activity that was carried out with psychology students by Dodd (1985), who found that 36% of responses fell into this category — interestingly, the same percentage as he found when carrying out the same activity with inmates of a maximum security prison.

Introduce the term deindividuation. Tell the students that it usually refers to behaviour when an individual is in a social group, the key factor being the anonymity of being in that group; we experience ourselves as part of a group rather than an individual. Anonymity has the effect of disinhibition, i.e. our normal inhibitions about behaving in ways in which we would not normally behave become relaxed. This theory has been proposed to explain aggressive behaviour, for example at a football match. However, it can be used to explain aggression in any situation where an individual is anonymous and so cannot be held responsible for his or her actions.

Dodd, D. (1985) 'Robbers in the classroom: a deindividuation exercise', *Teaching of Psychology*, Vol. 12, pp. 89–91.

4.3 Are males more aggressive than females?

Time: 1–1½ hours, depending on whether a statistical analysis is carried out

Resources: IS 4.1 and IS 4.2

This activity aims to test the idea that there are gender differences in aggression, with males typically being more aggressive than females. It has been suggested that the hormone testosterone may mediate aggression and males usually have higher levels of testosterone than females. In humans, males of all ages, races and cultures are generally found to be more physically aggressive than females.

The questionnaire on IS 4.1 has been constructed along the lines of the 'aggression questionnaire' produced by Buss and Perry (1992), to include questions on what they propose are the four aspects of aggression.

- physical aggression (5, 8, 11, 16, 18, 21), a behavioural component
- verbal aggression (2, 10, 14, 17, 20, 23), a behavioural component
- hostility (3, 7, 13, 22), the cognitive component
- anger (1, 4, 6, 9, 12, 15, 19), the affective (emotional) component

Students should be asked to find one or more respondents, to include males and females, to complete the questionnaire. Before they do so, they should prepare as a class appropriate instructions, including an ethical briefing. This can be used as an opportunity to remind them of the importance of standardisation. As they collect the data, they should note on each questionnaire whether the respondent is male or female. When the data have been collected, the questionnaires can be scored, using the following scoring system:

Questions: 1, 10, 15, 17, 23

Extremely characteristic of me	Quite characteristic of me	Neither characteristic nor uncharacteristic of me	Quite uncharacteristic of me	Extremely uncharacteristic of me
1	2	3	4	5

All other questions:

Extremely characteristic of me	Quite characteristic of me	Neither characteristic nor uncharacteristic of me	Quite uncharacteristic of me	Extremely uncharacteristic of me
5	4	3	2	1

Point out that the reason behind varying the scoring system is to avoid the possibility of a response set.

The mean for males and for females can then be compared and students should be asked to identify the statistical test which would be used to analyse the data (Mann-Whitney), using the flow chart on page 138. They could then carry out the analysis. The results can also be compared with the findings on global aggression of the studies outlined on IS 4.2.

Further analyses could also be carried out. Although the studies on IS 4.2 have somewhat mixed results, overall they seem to suggest that males may be more likely than females to express their aggression physically, so a male-female comparison could be carried out using only the scores relating to physical aggression. Similarly, females may be more likely than males to express their aggression verbally, so here too a comparison could be carried out using only the scores for verbal aggression.

The findings shown could be used to discuss the relative merits of biological and social psychological theories of aggression, as well as methodological issues. For example:

- The age of children when significant differences in physical aggression are shown, reported by Baillargeon et al., supports the idea of biological factors underlying gender differences in relation to this kind of aggression.
- The study carried out by Archer et al. suggests that there are no gender differences in aggression when it is considered globally, but that there are gender differences in how it is expressed, perhaps indicating the influence of socialisation processes.
- The Hines and Saudino study relies on self-report. Students might query the validity of this approach when investigating a sensitive area such as aggression.

4.4 The role of neural and hormonal mechanisms in aggression

Time: 1 hour
Resources: WS 4.2

This activity aims to help students organise the material on biological explanations of aggression. They should use their textbooks to complete the table on WS 4.2. This could be carried out in class or set as a homework assignment.

Suggested answers:

Limbic system associated with emotional arousal and response.

- Klüver and Bucy (1939) — removal of the amygdala made monkeys docile. **Comment** — this involves extrapolation from animals.
- Albert et al. (1993) — in humans, aggression is linked to tumours in the medial hypothalamus and septal region and with seizure activity in the amygdala. **Comment** — people with no brain lesions can also be aggressive.

Prefrontal cortex associated with the conscious control and inhibition of behaviour.

- Raine et al. (1997) — people convicted of murder had reduced activity in the prefrontal cortex and abnormal activity in the amygdala and thalamus. **Comment** — this fits well with the well-established link between damage to this brain area and increased impulsivity, *but* the sample may not be typical of most aggressive people. Not all people with prefrontal cortex damage are violent.
- Gur et al. (2002) — women have proportionally larger frontal brain regions than men, so may be better able to control emotional responses. **Comment** — most studies have shown men to be more aggressive. However, it may be that women are more likely to express aggression differently, i.e. verbally rather than physically, rather than being essentially less aggressive (see IS 4.2).

Testosterone

- Kalat (1998) — young men aged 15–25, an age at which testosterone levels are at their highest, also demonstrate the highest levels of aggression, as measured by crime statistics. **Comment** — this is correlational evidence, so other (psychological) interpretations are possible, e.g. Klimesmith (2006) found that handling a gun — associated with aggressive behaviour — caused testosterone levels to rise. The correlations found are usually small, e.g. +0.14 (Book et al., 2001).
- Males usually have higher levels of testosterone than females and many studies have found that men are more aggressive (at least physically) than women. **Comment** — a testosterone–aggression link is well-established in non-human animals. However, aggression is not increased when testosterone is administered for medical purposes.

Serotonin

- Kyes et al. (1995) — low serotonin levels in monkeys increases aggression; raising serotonin levels reduces it. **Comment** — this involves extrapolation from animals.
- Virkkunen et al. (1987) found that people with a history of aggression showed low levels of serotonin in their cerebrospinal fluid. Moffitt et al. (1998) found a relationship between serotonin levels and aggression for men. **Comment** — there was no relationship for women, so the explanation is limited. Both studies are correlational, so the direction of the effect is unclear. Aggressive behaviour could instead affect serotonin levels.
- Bernhardt (1997) suggests that perhaps a combination of high levels of testosterone and low levels of serotonin leads to aggression; high testosterone and low serotonin levels make aggression more likely. **Comment** — this fits well with the finding that the amygdala and the hypothalamus are associated with both testosterone and serotonin.

4.5 Essay

Time: 30 minutes + 30 minutes preparation

- Outline what is meant by institutional aggression.** (5 marks)
- Discuss evolutionary explanations of human aggression.** (20 marks)

If this is the first PSYA3 essay students have written, it might be useful to spend some class time in preparation. Students could then write the essay, either under timed conditions in class (with or without a prepared plan), or for homework. In either case, remind them that they should only write as much as could be achieved in around 30 minutes.

Part (a) is worth just 5 marks, so students need only give a definition of institutional aggression, together with an example which would help to clarify the meaning; no evaluation is required. This part attracts AO1 marks. For part (b), AO1 marks would be awarded for a description of evolutionary explanations and AO2 marks for a discussion of both positive and negative aspects of this kind of explanation. As with all essays, this will include reference to related research; remind students that they need to comment on this research, in terms of what it contributes to an answer to the question.

Explanations should focus on gender differences, and could begin by referring briefly to explanations as to why aggression would have been adaptive in males in our evolutionary past. The main focus should then be on infidelity and jealousy. Physical aggression by males in response to female infidelity should be linked to the concept of paternal uncertainty, which would then lead to an account of aggression resulting from jealousy, and why the causes might be expected to differ between males and females.

Research support in relation to infidelity could include the account by Daly and Wilson (1996) of cross-cultural differences in the ways men try to increase paternal certainty, and the Buckle et al. (1996) study of reasons given for divorce. In relation to jealousy, the Buss (1992) study, comparing the causes of jealousy in male and female partners, could be used to support gender differences.

Criticisms of evolutionary explanations could draw on the findings of Harris (2002), in a study that looked at responses to real, rather than hypothetical, infidelity, as well as the suggestion made by Harris and Christenfeld (1996), linking gender differences to differing interpretations of infidelity rather than innate differences.

More general arguments about the usefulness of evolutionary explanations in this area of research can also be included for AO2 marks, in particular that while research is often consistent with evolutionary explanations, direct testing of these hypotheses is not possible, leaving the findings open to alternative interpretations.

Questionnaire

For each statement, circle the response which most closely refers to you.

- 1 I take the rough with the smooth and do not easily get upset.

Extremely characteristic of me	Quite characteristic of me	Neither characteristic nor uncharacteristic of me	Quite uncharacteristic of me	Extremely uncharacteristic of me
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- 2 I often get into arguments.

Extremely characteristic of me	Quite characteristic of me	Neither characteristic nor uncharacteristic of me	Quite uncharacteristic of me	Extremely uncharacteristic of me
-----------------------------------	-------------------------------	---------------------------------------------------------	------------------------------------	----------------------------------------
- 3 If someone is especially nice to me, I wonder what they are after.

Extremely characteristic of me	Quite characteristic of me	Neither characteristic nor uncharacteristic of me	Quite uncharacteristic of me	Extremely uncharacteristic of me
-----------------------------------	-------------------------------	---------------------------------------------------------	------------------------------------	----------------------------------------
- 4 I can sometimes get really angry for no good reason.

Extremely characteristic of me	Quite characteristic of me	Neither characteristic nor uncharacteristic of me	Quite uncharacteristic of me	Extremely uncharacteristic of me
-----------------------------------	-------------------------------	---------------------------------------------------------	------------------------------------	----------------------------------------
- 5 If someone annoys me, I have been known to lash out.

Extremely characteristic of me	Quite characteristic of me	Neither characteristic nor uncharacteristic of me	Quite uncharacteristic of me	Extremely uncharacteristic of me
-----------------------------------	-------------------------------	---------------------------------------------------------	------------------------------------	----------------------------------------
- 6 Some people just seem to have all the luck in life.

Extremely characteristic of me	Quite characteristic of me	Neither characteristic nor uncharacteristic of me	Quite uncharacteristic of me	Extremely uncharacteristic of me
-----------------------------------	-------------------------------	---------------------------------------------------------	------------------------------------	----------------------------------------
- 7 I believe that people talk about me behind my back.

Extremely characteristic of me	Quite characteristic of me	Neither characteristic nor uncharacteristic of me	Quite uncharacteristic of me	Extremely uncharacteristic of me
-----------------------------------	-------------------------------	---------------------------------------------------------	------------------------------------	----------------------------------------
- 8 I have been known to throw things when I get angry.

Extremely characteristic of me	Quite characteristic of me	Neither characteristic nor uncharacteristic of me	Quite uncharacteristic of me	Extremely uncharacteristic of me
-----------------------------------	-------------------------------	---------------------------------------------------------	------------------------------------	----------------------------------------
- 9 Sometimes I feel angry about the way my life is going.

Extremely characteristic of me	Quite characteristic of me	Neither characteristic nor uncharacteristic of me	Quite uncharacteristic of me	Extremely uncharacteristic of me
-----------------------------------	-------------------------------	---------------------------------------------------------	------------------------------------	----------------------------------------
- 10 I do not often lose my temper.

Extremely characteristic of me	Quite characteristic of me	Neither characteristic nor uncharacteristic of me	Quite uncharacteristic of me	Extremely uncharacteristic of me
-----------------------------------	-------------------------------	---------------------------------------------------------	------------------------------------	----------------------------------------
- 11 I will fight tooth and nail for what is mine.

Extremely characteristic of me	Quite characteristic of me	Neither characteristic nor uncharacteristic of me	Quite uncharacteristic of me	Extremely uncharacteristic of me
-----------------------------------	-------------------------------	---------------------------------------------------------	------------------------------------	----------------------------------------

- | | | | | | |
|----|------------------------------------------------------------------------------|-------------------------------|---------------------------------------------------------|------------------------------------|----------------------------------------|
| 12 | I sometimes feel that nothing ever seems to go my way. | | | | |
| | Extremely
characteristic of me | Quite characteristic
of me | Neither characteristic
nor uncharacteristic
of me | Quite
uncharacteristic
of me | Extremely
uncharacteristic
of me |
| 13 | I sometimes feel that people are making fun of me when I am not there. | | | | |
| | Extremely
characteristic of me | Quite characteristic
of me | Neither characteristic
nor uncharacteristic
of me | Quite
uncharacteristic
of me | Extremely
uncharacteristic
of me |
| 14 | I tend to lose my temper quite easily. | | | | |
| | Extremely
characteristic of me | Quite characteristic
of me | Neither characteristic
nor uncharacteristic
of me | Quite
uncharacteristic
of me | Extremely
uncharacteristic
of me |
| 15 | I am usually calm and laid back. | | | | |
| | Extremely
characteristic of me | Quite characteristic
of me | Neither characteristic
nor uncharacteristic
of me | Quite
uncharacteristic
of me | Extremely
uncharacteristic
of me |
| 16 | Sometimes I just feel the need to hit someone. | | | | |
| | Extremely
characteristic of me | Quite characteristic
of me | Neither characteristic
nor uncharacteristic
of me | Quite
uncharacteristic
of me | Extremely
uncharacteristic
of me |
| 17 | I tend to hold my tongue, even if I do not agree with what other people say. | | | | |
| | Extremely
characteristic of me | Quite characteristic
of me | Neither characteristic
nor uncharacteristic
of me | Quite
uncharacteristic
of me | Extremely
uncharacteristic
of me |
| 18 | If someone winds me up the wrong way, I have been known to threaten them. | | | | |
| | Extremely
characteristic of me | Quite characteristic
of me | Neither characteristic
nor uncharacteristic
of me | Quite
uncharacteristic
of me | Extremely
uncharacteristic
of me |
| 19 | I sometimes feel that I am going to lose control of myself. | | | | |
| | Extremely
characteristic of me | Quite characteristic
of me | Neither characteristic
nor uncharacteristic
of me | Quite
uncharacteristic
of me | Extremely
uncharacteristic
of me |
| 20 | I do not hold back when people irritate me. | | | | |
| | Extremely
characteristic of me | Quite characteristic
of me | Neither characteristic
nor uncharacteristic
of me | Quite
uncharacteristic
of me | Extremely
uncharacteristic
of me |
| 21 | If a situation seems likely to get physical, I just withdraw. | | | | |
| | Extremely
characteristic of me | Quite characteristic
of me | Neither characteristic
nor uncharacteristic
of me | Quite
uncharacteristic
of me | Extremely
uncharacteristic
of me |
| 22 | When a stranger is friendly, I wonder what lies behind it. | | | | |
| | Extremely
characteristic of me | Quite characteristic
of me | Neither characteristic
nor uncharacteristic
of me | Quite
uncharacteristic
of me | Extremely
uncharacteristic
of me |
| 23 | I do not often argue with people. | | | | |
| | Extremely
characteristic of me | Quite characteristic
of me | Neither characteristic
nor uncharacteristic
of me | Quite
uncharacteristic
of me | Extremely
uncharacteristic
of me |

Gender and aggression

Hines and Saudino (2003)

In a study with 481 student participants, there were no differences between males and females in reported physical aggression. Females reported more psychological aggression. Reported physical and psychological aggression tended to co-occur.

Baillargeon et al. (2007)

In a study of young children, there were significant gender differences in physical aggression. At 17 months, 5% of boys but only 1% of girls showed physically aggressive behaviours on a frequent basis.

Archer et al. (1988)

In a study of 72 boys and 72 girls (aged 6–11 yrs), there were no overall gender differences in aggression. However, boys showed significantly more physical aggression than girls, while girls showed significantly more verbal aggression than boys.

Hines, D.A. and Saudino, K.J. (2003) 'Gender differences in psychological, physical and sexual aggression among college students using the revised conflict tactics scales', *Violence and Victims*, Vol. 18, No. 2, pp. 197–217

Baillargeon, R.H. et al. (2007) 'Gender differences in physical aggression: a prospective population-based survey of children before and after 2 years of age', *Developmental Psychology*, Vol. 43, No. 1, pp. 13–26.

Archer, J. et al. (1988) 'Aggressive behaviour of children aged 6–11: gender differences and their magnitude', *British Journal of Social Psychology*, Vol. 27, No. 4, pp. 371–384.

Social learning theory (SLT)

Complete the following account of SLT.

- 1 As with classical and operant conditioning, SLT explains behaviour as the result of _____ . It was developed by _____ and uses the same idea of reinforcement as _____ conditioning. However, learning comes about not as the result of the effects of our own behaviour, but by observing the behaviour of others and the _____ of this behaviour, i.e. _____ . This process is called _____ . If this behaviour has a positive outcome, i.e. if it is _____ , we are more likely to behave in a similar way, i.e. to _____ the behaviour. Observing someone's behaviour being _____ has a greater effect on our behaviour than seeing his or her behaviour being _____ . The three sources of models are: _____ , e.g. parents or older siblings; _____ , e.g. friends; the _____ , e.g. television programmes. The theory has, in particular, triggered a lot of research into the effects of the _____ .
- Unlike classical and operant conditioning, this theory has a _____ element, since internal _____ are taken into account. Modelling is not the same as _____ , as we do not automatically copy others' behaviour, but think about whether the behaviour we have observed is _____ for us.
- We are more likely to model the behaviour of those who are _____ to us and who are seen as having _____ . The effects are more marked for people who have low _____ - _____ .
- 2 List as many evaluative points as you can, both positive and negative, of the Bobo doll studies.

The role of neural and hormonal mechanisms in aggression

Use your textbook to complete the following table. In the left-hand column, complete the phrase, 'associated with...'. In the middle column, summarise the findings of relevant research. In the right-hand column, evaluate the research and comment on any other related issues.

Mechanisms	Research evidence	Evaluation and commentary
Limbic system associated with		
Prefrontal cortex associated with		
Testosterone		
Serotonin		