

PAPER 1		CRIMINAL PSYCHOLOGY		Development		PSYCHOLOGICAL PROBLEMS	
		Cooper and Mackie (1986) Video Games and Aggression in Children	Heaven (1996) Delinquency, Extroversion, Psychoticism and Self-Esteem	Piaget (1952) Conservation of Number	Blackwell et al. (2007) Fixed and Growth Mindset	Daniel et al. (1991) Effect of Amphetamines on PFC of Schizophrenics	Tandoc et al. (2015) Is Facebook Depressing?
Outline (AO1)	Sample	84 children, aged 9-11 from schools in New Jersey, USA	282 teenagers (aged 13-15) from two Catholic schools in Australia.	Swiss children in the pre-operational and concrete operational stages.	Investigation 1: 373 NY students Investigation 2: 99 NY students	10 chronic schizophrenics	854 journalism students from an American university (68% female)
	Research Method	Lab experiment	Questionnaire and longitudinal	Natural experiment and cross-sectional study	Investigation 1: Correlation study Investigation 2: Field experiment	Lab experiment (double-blind)	Questionnaire (online survey)
	Aim	To see if aggressive video games would lead to increased aggression.	To test the link between Eysenck's personality traits and delinquency.	To see the stage of development when children are able to conserve.	Impact of growth mindset on maths ability, achievement and motivation.	To see whether amphetamines affect PFC and WCST performance.	To see whether Facebook use predicted depression.
	Procedure	An independent groups design was used and participants either played or observed a high aggression game (Missile Command), a low aggression game (Pac-Man) or a control game (maze-solving with a pen and pencil). They then went to a playroom to see which toy they chose to play with (aggressive, active, quiet or skill). Interpersonal aggression was also measured by answering questions on a scenario.	Heaven measured psychoticism, extroversion and self-esteem (instead of neuroticism as it's thought to be a component of neuroticism) at Time 1 (around 14) and then two years later (around 16) at Time 2. 80% of participants responded at Time 2. Heaven also used self-report to get measures of delinquency at Time 1 and Time 2. This looked at violence, vandalism and theft.	Children were presented with two identical, parallel lines of counters. The child was asked "Is there the same number of counters in each row?" They then watched as one of the lines was spread out without adding any more counters. The children were asked for a second time "Is there the same number of counters in each row?"	Investigation 1: Students in 7 th grade were given a maths test and a motivation questionnaire (measuring fixed and growth mindset). Investigation 2: 7 th grade students given a motivation questionnaire (looking at growth mindset). Students were then placed in either an 8-week growth mindset intervention group or a control group. 3 weeks after the intervention they were given the motivation questionnaire again. Teacher reports of motivation and maths grades were also used.	Participant received a dose of either the amphetamine or placebo (double-blind). They completed the WCST (PFC task) and BAR task (control task) on a computer whilst in a SPECT scanner. They then did the same tasks 2-4 days later with the amphetamine if they had the placebo the first time and the placebo if they had the amphetamine (it was therefore a repeated measures design).	The questionnaire measured the following: 1. Facebook usage and surveillance 2. Envy Scale 3. Depression symptoms *Facebook surveillance involves looking at friends' status' but not commenting or posting own information.
	Findings	Boys preferred to play rather than observe, whereas girls generally preferred to observe. After playing the aggressive game, children spent longer playing with the aggressive toy. This finding was much bigger in girls. The type of game had no effect on the interpersonal aggression.	Males are more likely than females to be involved delinquency at Time 1 and Time 2. There was found to be a positive correlation between psychoticism and delinquency at Time 1 and Time 2. (However, these traits only explain a part of criminal behaviour. It is likely to be due to other psychological factors such as - peer pressure, parents' disciplinary styles, parent's personality etc.)	Children at the <u>beginning of the preoperational stage</u> (3-4 years) usually said there were more in the stretched row. Some children at the <u>end of the preoperational stage</u> (5-6 years) stated they were both the same, but couldn't say why. Most children in the <u>concrete operational stage</u> (7+) recognised both rows had the same number of counters and could explain why.	Investigation 1: At the beginning of 7 th grade there was no correlation between mindset and maths. However at the end of 7 th grade they found that having a fixed or growth mindset was a predictor of maths achievement. Investigation 2: The growth mindset group had more of a growth mindset after the intervention, were reported by teachers to be more motivated and got better maths grades.	There were no differences between the effects of the placebo and amphetamine when completing the BAR (control) task. There was a small difference between the amphetamine and placebo in the WCST as some areas of the prefrontal cortex were active (e.g. the left dorsolateral prefrontal cortex was affected). The amphetamine had a small but positive effect on the number of correct responses in the WCST.	Heavy Facebook users did show stronger feelings of envy. The size of the network of Facebook friends was not related to envy. Facebook envy was a predictor of depression. It is Facebook surveillance that leads to depressive symptoms, but only if it triggers feelings of envy. Facebook surveillance can actually lessen feelings depression when used positively and not leading to envy.
	Conclusion	Playing or watching an aggressive video game had an impact on the aggressive behaviour of girls but not boys.	Psychoticism is linked to delinquency.	Children in the concrete operational stage realised that appearances can be deceiving and were able to conserve.	Growth mindset is related to maths ability. Also teaching growth mindset has a positive impact on achievement and maths grades.	Tentative conclusions were made that amphetamines appeared to increase the ability of the prefrontal cortex to focus in the WCST.	The use of Facebook does not directly lead to depression. However, Facebook envy can lead to depression.
Evaluate (AO3)	Limitations (Know two points well)	The sample was biased as it only investigated a small age range and one culture. Therefore it can't be generalised , since the impact of computer games may be due to the cultural setting in which they are played or the age of the child. The study was in artificial conditions meaning it lacked ecological validity as it is not how video games are played in real life. Video games are not normally played under such strict time conditions, or with one person watching who is not able to get involved. This means the effects may be stronger or weaker in this controlled environment.	The study can't be generalised as the sample is biased as it used participants from Catholic schools in Australia. Religion has a strong influence on children's moral behaviour as does family income and culture. Therefore different findings may be gained for children from other schools and countries. The study had participants drop out because it was longitudinal. 20% of the original sample didn't take part at Time 2. This may have left an unrepresentative sample at Time 2, meaning the sample is further biased. The study used self-report methods, so participants may have lied or exaggerated their answers for social desirability reasons. They may have said that they hadn't committed any delinquent acts when they had, so that they looked better.	The study cannot be generalised as Piaget only used a limited sample of children (including his own). Therefore, the study is said to be culturally biased, since the ability to conserve may be affected by education and upbringing. This means the stages may not be as universal as Piaget claimed The study was criticised for not being child friendly . When "naughty teddy" moved the counters, it made more sense to preoperational children and 60% of children in this stage got the answer right. Normally if a child is asked a question twice, it means they got the answer wrong the first time. Therefore in this study children may have changed their answer when asked a second time. When other researchers have conducted the study only asking the question once, more children in the preoperational stage got it right.	The study cannot be generalised as it is culturally biased, since it was only conducted in New York. The results might not be representative of children in different countries. It might be that something about the New York education system had an effect on their mindset. The study is reductionist (too simple) as it only focussed on the students' mindsets. It ignores the impact of parents and teachers' mindsets on the student's beliefs and achievement. The difference in findings in investigation 2, between the growth mindset group and control group, were small. Therefore, maybe mindsets don't have that big an influence on achievement and there are other factors that are more important. However, the researchers argue that even small effects can have a greater impact over time.	The study can't be generalised as the sample was very small. The findings therefore may not be representative of other people with schizophrenia. The sample was also culturally biased as the sample was mainly white American. Since the rates of schizophrenia are different for different ethnic groups, caution is needed when suggesting these findings show a relationship between the brain and schizophrenia. Some critics are concerned about the ethical issues of using brain scanners. This is because it is not clear what the long term consequences of these scans are. This is especially the case when participants are scanned just for the sake of research and not for medical reasons.	The study can't be generalised it is based on students from one university in the USA, meaning it isn't representative. Therefore, it shows a culture bias and age bias since the relationship between Facebook use and depression may not be the same for other countries or age groups. Participants may have lied or exaggerated to give socially desirable answers. For example, they may not have been honest about how envious they felt about others on Facebook and instead gave answers to make them look good. The questions used are thought to be too simple . This is because rating scales do not show the complexity of disorders such as depression or feelings of envy. Therefore, the study is thought to lack construct validity (how much a test measures what it claims to be measuring).