SENSORY MEMORY

Initial contact for stimuli

Iconic = visual
Echoic = auditory
Haptic = sensory input

DURATION AND CAPACITY OF SENSORY MEMORY

A01 – Sperling 1960 presented participants with recall of letters in matrix

Findings – On average participants recalled 4-5 letters but reported seeing more

Second Study
 Participants were prompted to recall either the top, middle or bottom row of letters
Findings – On average recalled 3 letters

A02
Sperling’s research can be criticized for lacking external validity
For example, recalling a letter matrix is not an activity participants are expected to complete as a part of everyday life
Therefore it is difficult to know whether Sperling’s results apply to other ‘everyday’ tasks that require sensory memory

SHORT TERM MEMORY

CAPACITY
Limited storage space
7 + - 2

JACOBS 1887 DIGIT SPAN TECHNIQUE

Found out how many digits people could recall average 9.3 digit span
Saw people were ‘chunking’

MILLER 1956

Magical Number Seven

- Moved onto the letter span for chunking

A02
Anxiety = less likely to remember top end of digit span due to distractions or worries (MacLoed 19993)

Reading aloud = increases capacity because it accesses senses (Baddeley 1999)
Findings:
Face and name recognition = 90% accuracy (who had left 34 years previously)
Dropped to 80% accuracy (48 years previously)
Face recognition = 40% (48 years previously)
Free recall = 60% accuracy (15 years previously)
Dropped 30% accuracy (48 years previously)

CONCLUSIONS
Recognition is better than recall
Classmates are rarely forgotten once recognition cues have been given

EVALUATION A02

STRENGTHS
High level of mundane realism; remembering a face is a task relating to life/high external validity
Different range of participants, ages + gender
Easily replicable

LIMITATIONS
Familiar faces are very specific type of information and therefore results cannot be generalized
Social media creates lots of extraneous variables
Low internal validity
Emotional connections or school reunions are not controlled for

ENCODING IN STM + LTM
Baddeley 1966

STM
Procedure: word sequences were presented + participants were allowed 20 seconds to write the word list in serial order
Divided into acoustically similar eg. Mad, man, map, mat
Acoustically dissimilar eg. Cow, day, hot
EVALUATION A02

STRENGTHS

Independent group design = can be sure of independent variables (identify cause and effect)

Lab experiment = provides highly replicable results

High in internal validity = procedure is highly controlled eg. Video

LIMITATIONS

Population validity = does not take into account age? Could have a different correlation

The IV = verb is quite easily identifiable + participants can work out

Lab experiment = promotes demand characteristics that could lead to social desirability + attention is increased in a lab thus emotional response is not present

Lacks eternal validity
Low ecological validity
^Low population validity = university students (not representative)

HOWEVER

Loftus follow up Study 1980
x 2 days after seeing video — participants asked whether they saw a stop sign (money incentive/concentrate more)

Age is an important moderating variable in the relationship between age and the accuracy of eye witness testimony

Warren et al 2005 =
Children are more likely to be influenced by misleading information than adults Confidence/expertise/perception

EFFECT OF ANXIETY ON THE ACCURACY OF EYE WITNESS TESTIMONY

WEAPON FOCUS

Loftus 1979
Weapon focus – linked to anxiety + less attention available
EFFECTS OF AGE ON THE ACCURACY OF EYE WITNESS TESTIMONY

Yarmey 1984

Found older people made more recall errors than younger people

20% = young adults missed key detail

80% = missed the key detail

SOURCE MONITORING

Poole and Lindsay 2001

3-8 year olds watched a science demonstration and then were read a story by their parents (new information)

Asked questions:

3 & 8 year olds had incorporated the novel information

H owever

Only older children were able to monitor the source of their information

OWN AGE BIAS

Anastasi + Rhodes 2006

Recognition test

Results show both children and older adults more accurately recognized their own-age faces from other-age faces

Yarmey 1993

Stopped 651 people in a public place and asked them about the physical characteristics of a young woman they talked to for 15 seconds, 2 minutes ago

No significant different in the accuracy of recall that could be linked to the witness age

IMPROVING THE ACCURACY OF EYE WITNESS TESTIMONY

COGNITIVE INTERVIEWS

Fisher et al 1987

1. Context Reinstatement (CR) – mentally reinstate the target event, recall scene, weather, what you were thinking at the time/feeling etc
7. Acrostics

Poem/other form of writing where the first letter of each word meaning something

8. Context Reinstatement (dependent learning)

Learn material in the same context as you are going to do in the exam
Applied examples/eg. Past papers
RUTTER et al 2007

Research method: Natural experiment: ongoing longitudinal study
Aim: Compare development of Romanian orphans: 3 different groups
Conditions in Orphanage: very poor/severe

Findings:

<table>
<thead>
<tr>
<th></th>
<th>No disinhibition</th>
<th>Mild disinhibition</th>
<th>Marked disinhibition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uk adoptees</td>
<td>21 (40.4%)</td>
<td>29 (55.8%)</td>
<td>2 (3.8%)</td>
</tr>
<tr>
<td>Romanian &gt;6 months</td>
<td>24 (53.3%)</td>
<td>17 (37.8%)</td>
<td>4 (8.9%)</td>
</tr>
<tr>
<td>Romanian 6-24 months</td>
<td>26 (29.5%)</td>
<td>39 (44.3%)</td>
<td>23 (26.1%)</td>
</tr>
</tbody>
</table>

CONCLUSIONS

Disinhibited attachments = more likely experienced longer periods of time in institutions

Follow up study

Children 11 years = found disinhibited behavior pattern had persisted in many adoptees
X83 Romanian children mild or marked disinhibited attachments

= Many of the children were receiving help from either special educational or mental health services

LONG TERM EFFECTS OF INSTUTIONALISATION

Gunmar and van Dulman 2007

Found: late-placed adoptees had more behavioural problems than early-placed adoptees
Institutionalized children showed higher rates of attention and social problems

Very long term

Sigal et al 2003

Middle-aged adults who had been placed in institution
Findings: adults were far more likely to NEVER have married
Fewer social skills + more ‘psychological distress’ eg. Depression
CAMPBELL et al 2000

Longitudinal prospective study

Children assessed: BEFORE they started day care then during+after

Method 1: observed in their homes with familiar peers

Method 2: researchers assessed standard of care

Findings: Long day care setting = less socially competent
Shorter time periods = more socially competent
High quality before age 3.5 = more socially competent

ASSESSED AGAIN
Observation when playing with others
Asking care providers to rate social competence
SSQ (Social Style Questionnaire)

Social Competence = seen as a STABLE characteristic between 3 and 15

CONCLUSION
Dare care quality + length of time affects the child’s social development.
There is a critical stage at 3.5

THE EFFECTIVE PROVISION OF PRE-SCHOOL EDUCATION (EPPE)
European longitudinal study
3,000 children from 141 centres

Aims: See different types of day care on development
See whether day care reduced social disadvantage

Children were assessed 3-4 years old for intellectual + social development

Findings:
ALL preschoolers were rated HIGHER on all aspects of social behaviour

Type of care setting was important in as much as centre with ‘high quality’

Disadvantaged backgrounds made more progress with children from a MIXED background

Spending too much time in day care AND child-minders before age of 2 years = associated with antisocial behaviour
High ecological validity = based on real communications gathered in natural settings

Effective way of presenting qualitative data in way = easy to understand

LIMITATIONS

Validity can be low = subjective judgments made

Time consuming = preparation + analyzing material

Ethical issues = unaware of parts of material being used

CODING

^ process used to transform raw data into format that can be used for analysis purpose

CASE STUDIES

In-depth study of just one individual (or particular group of people) = Ideographic
Unique cases/longitudinal

Requires other research methods = questionnaire/content analysis

STRENGTHS

Allow unethical subjects to be investigated
Complex interactions can be studied = rather than a simple relationship

LIMITATIONS

Limited number of people are investigated = difficult to generalize

Ethical issues = nature of participants eg. Young/significant disorder
Data can be unreliable = subjective

CORRELATIONAL ANALYSIS

Statistical technique looking at strength between 2 variables

RELATIONSHIP

Positive/negative correlation
Weak/strong