EPIC Memory Tests - The Conveyor Belt and Animal Memory Game

Aim
The aim of the Conveyor Belt game is to introduce students to an aspect of epidemiological cognitive data collection: mental recalling. Along with encoding and storage, recall is one of the three core processes of memory; and consequently recall tests are used to study the memory processes in both humans and animals.

The aim of the Animal Memory Game is again to introduce students to an aspect of epidemiological cognitive data collection: this test looks at examining verbal fluency and semantic memory. Verbal fluency includes our executive functioning; that is, the sort of thinking that we use each day to make plans, solve problems and multi-task. Semantic memory is concerned with the aspect of our memory that deals with knowledge and attributed meanings.

Numbers
Children: If conducted orally, only one child is able to play this game at a time (although you can alter the game to have several attempting to complete the conveyor belt or name as many animals as they can collectively); yet were you able to have children writing the items they recall from the conveyor belt, or writing how many animals they can name in a specific time, the games would be able to reach an entire class at any given time.

Staff/helpers: This activity can easily be conducted by one member of staff, although if the game is being played in smaller groups then a classroom assistant shall be required to engage and interact with the pupils currently playing the game.

What is needed?

Borrowed materials
- A USB stick containing the conveyor belt powerpoint presentation (alternatively this can be received by email)
- 2 wipe-clean scoring sheets recording lists of animals recalled
- A wipe-clean list displaying all items included in the conveyor belt presentation.
- 10 information sheets (animal shaped)
- Whiteboard pens
- Screen wipes for cleaning sheets

Self-sourced
- A laptop and, if conducting the conveyor belt on a class of children, a projector
Setting up
Load the PowerPoint presentation either from the USB or email attachment to display it either on a laptop or projected at the front of a classroom. Make sure each pupil can see.

Step-by-step instructions
1. Inform the students that you are to begin a slideshow and instruct them to try and remember each item that they see.
2. Tell them that you shall be asking them to recall each item, in no particular order, when the slideshow ends.
3. Begin the Powerpoint show and let it play to the end. Having done this, ask the player to verbally recall as many items as he/she can whilst marking each recalled item upon the specially pre-prepared answer sheet. If involving more than one player, ask the players to write down their recalled items. They can then potentially swap answer sheets and mark each other’s answers.
4. One the player has recalled all the items he/she is able to, inform him/her of his/her score.

The animal recall test is conducted in a similar manner:
1. Ask the participating player to recall as many animals as he/she is able in 30 seconds
2. Use the wipe-clean scoring sheet to record how many animals were recalled
3. At the cessation of the 30-second interval inform the player of his/her score
4. If playing with more than one player, have the pupils write down how many animals they can recall in a 45-second window
5. Have the pupils swap sheets between themselves, mark the number of distinct animals named and then give the original ‘recaller’ his/her score

Supporting activities
In instances were pupils are not currently participating in the recall activities due to awaiting their turn etc, activities to support in pupil learning of the theory involved behind these tests, their relevance and the underpinning biological processes under examination, would centre around having pupils research the role of memory, the differing aspects of memory and potentially any illnesses and diseases which affect memory and how they do this.

Clearing up
Discard any answer sheets, unless pupils wish to keep these for themselves. If using the EPIC-prepared laminate answer sheets, please remove the whiteboard marker from the laminate with a damp cloth/wipes provided, as it shall permanently mark the sheet, thus rendering it unusable again, if left on for longer than 5 minutes.

Please fill in the evaluation form provided in the activity box and put on top of the activity when returning it. Your feedback will help us to improve our activities and the library. Thank you
What to return?
Please return any materials listed under ‘borrowed materials’. Please use the box/bag in which you received it. Arrange for a delivery date by phoning: 01223 748681.

Risk assessment
Additional risk assessment might be needed to cover local circumstances and environment. Please contact your (school) representative if in doubt.

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<th>Number</th>
<th>Risk</th>
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<td>1</td>
<td>Upsetting a participant over a poor memory score</td>
<td>Explain that this test is not being conducted in the proper setting or under the proper conditions. If excessively concerned advise player to see their GP</td>
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Photos