Concepts



Concepts What it is - Putting things into categories known as concept formation - Group of objects that have similar properties which you can further subconcept to organize them further, Example - Food can be put into categories of meat, fish, dairy, and vegetables you can then subconcept into meat into beef, pork, and lamb and so on for fish, dairy, and vegetables Evidence/ experiments - Research carried out by George Mandler (1967 cited in spoors et al 2011) supports that by organizing information we learn it even if we don't mean to. He carried out an experiment giving two groups of participants a pack of 100 cards with words on. They were asked to put the cards into group. He asked one group to memorize cards, later testing both groups by asking them to write down the words they could remember, the group that were not asked to memorize the words remembered just as many words as the group that did memorize them. Schemas What it is - A mental framework of knowledge developed as a result of experience, objects, situations, groups of people and yourself. Example - Memory is like a huge mental filing cabinet and each file is a schema. They help us to deal with new situations more efficiently by applying past similar experiences we have encountered. They help to recall information that is stored and provide cues to prompt our memory. Evidence/experiments - Swiss psychologist Jean Piaget spent over 50 years investigating the ways children develop their thinking. He thought they did this by developing schemas which are built up from their experience of the world. John Bransford and Maria Johnson (1972) cited in spoors et al 2011) carried out an experiment by giving a group of participants a passage of writing to read and then asked them to recall it as best they could. However half of them were given a title and the other half were not. The passage of writing was about washing clothes, however it is

difficult to understand the passage without having the title 'washing clothes in mind, as the title provides a schema so the information can be stored appropriately and recalled easily. How can mental images, concepts and schemas improve memory? There are three different types of memory. Episodic memory is responsible for past experiences for example childhood memories. Then there is semantic memory which involves facts and knowledge, for example the capital of England is London. Last of all is procedural memory which is how we learn to do things, for example learning to tie your shoelaces or learning to drive a car. In this essay I am going to discuss how mental images concepts and schemas help us to remember and group our thoughts to improve memory recall. I will examine what they are and how they are successful in improving memory by giving sufficient evidence and examples from various experiments that have been carried out (cited in spoors et al 2011). First of all I would like to discuss the theory of mental images. Mental images are a way of remembering things by creating iconic pictures in your head. By doing this it helps you to fix what you need to remember into your brain because of the effort you make to put the image in there. Spoors et al (2011 pg. 45) give a good example of this when people are learning a foreign language. The idea is to think of an English word that sounds like part of the foreign word you are learning and image it. In this case the it was the French word 'poubelle' which translates bin in English. So they give an example of someone lifting up the lid of a bin that had turned into a bell (belle) and hold their nose because of the smell (pooh). Also a simple experiment carried out by Michael Raugh and Richard Atkinson (1975, cited in spoors et al 2011) proved that making a mental image of a keyword can help improve memory. This experiment was carried

by giving two groups of participants 60 Spanish words to remember. One group used the keyword technique and the other group did not. When they were later tested the group that used the keyword technique scored significantly higher than the group that did not. So the use of mental images can improve our memory by organizing our thoughts. They can also be very useful if adapted to different aspects of everyday life that are relevant to an individual's particular purpose. Secondly I am going to explain how putting things into categories can help improve memory, this is known as concept formation. It involves developing mental representation by developing categories of a group of objects that have similar properties. Subconcepts are usually then formed to further organize items. For example food can be put into categories of meat, fish, dairy, and vegetables. You can then subconcept meat into beef, pork, lamb and chicken and so on for fish, dairy and vegetables. Research carried out by George Mandler (1967, cited in spoors et al 2011) supports that by organizing information we learn it even if we are not making a conscious effort to. He carried out an experiment by giving two groups of participants each a pack of 100 cards that had words written on. The groups were then asked to put the cards into groups, however one of the groups of participants were also asked to memorize the cards as well. After later testing the two groups by asking them to write down the words they could remember, the group that were not asked to memorize the words remembered just as many words as the group that did try to memorize them. This gives good example that forming concepts can improve your memory considerably. Finally I am going to examine how schemas can improve memory. Schemas play a very important role in our memory, they act like files in a huge mental filing cabinet. They help us to

deal with new situations, objects and groups of people successfully by requesting knowledge from past similar experiences we have previously come across. Schemas help us to remember facts that are stored and supply cues to jog our memory. For example we may go to a new restaurant to have a meal, even though we may not have been to this particular restaurant before we can recall a schema, which tells us we should, look at the menu, order the food, eat and then pay for it. Swiss psychologist Jean Piaget spent a long time researching how children build their thought process. He suggested how they do it is they build schemas which grow from their exposure to everyday life's experiences. An experiment carried out by John Bransford and Maria Johnson (1972, cited in spoors et al 2011) investigated how schemas help us grasp and remember information. The experiment involved asking a group of participants to read a passage of writing and then recall what they read as closely as they could. However one half of the group were given a title and the other half were not. The passage of writing was about washing clothes but people may have difficulty associating it with this without the title in mind as the title supplies a schema so you can store the information correctly and remember it without difficulty. In conclusion the evidence and experiments given show a good example of how mental images, concepts and schemas help improve memory. Mental images provide recall of objects, concepts group information together making it easier to recall a collection of information. Finally schemas are used to help us to deal with new situations by recalling past knowledge or a similar experience helping us to properly process information and supply cues to jog our memory. Spoors, P., Dyer, E. W., Finlay, L. and Marsh, G. (20011) starting with psychology, Milton Keynes, The Open University.