Nervous System Disorders

Grammar point

1. Third Conditional. Complete the sentences using the verbs in brackets.

a. If Alexander the Great (march) ______ west instead of east, he (conquer) ______ the whole of Europe. b.If more Vikings (go) ______ to North America, they (bring) ______ some Indians back to Europe. c. If the ancient Egyptians (build) _____ bigger boats, they (cross) _____ the Atlantic and (land) _____ in America. d.If Columbus (not read) about Marco Polo's trip to China, he (not try) to sail there by crossing the Atlantic. e. If Charles Darwin (not take) ______ a voyage to South America between 1831 and 1836, he (not write) ______ his famous book The Origin of Species. 2. Mixed Conditionals. Read the sentences and complete the correct form of verbs in brackets. a) If Katie _____ (not be) in the car accident, she _____ (not need) assistance for hygiene care. (she was in the car accident, now she needs the assistance every day) b) If my grandpa _____ (go) to the doctor earlier, he _____ (need) dialysis 3 times a week. (he did not go to the doctor soon enough, therefore he needs dialysis now) (take) an aspirin, I (have) a headache now. c) If I (I did not take aspirin, my head is throbbing with pain right now) d) You _____ (be) so tired if you _____ (go) to bed earlier. (you are tired now, you went to bed late yesterday) e) She _____ (take) the train yesterday if she _____ (can drive). (she cannot drive so she had to take the train) 3. Listening A Listen and decide if the statements are true or false. 1 Eleven years ago, simple washing-up would take for Ed Zine. a) a few minutes b) hours c) days. 2 His disorder has been cured a) completely b) partly c) not at all 3 When living in his basement, Ed would spend hours_____ the bathroom. a) getting to b) being in c) getting out of 4 He developed the disorder because he didn't want b) to die c) to live anymore a) his mother to die 5 Studies suggest that people with OCD a) don't differ in their thoughts from the rest of us b) don't differ in their behavior from the rest of us c) differ in their thoughts and behavior from the rest of us 6 Hoarding is a mental disease where people _____ immense quantities of garbage. a) throw away b) store c) produce 7 The worst of Ed Zine's condition is represented by his having to a) count all the time b) repeat every single gesture c) repeat endlessly words and phrases 8 Ed Zine didn't wash nor brush his teeth a) three weeks b) three months c) three years 9 Ed Zine fought the illness only because he didn't want to a) put shame on his family and friends b) put shame on himself c) live in the basement anymore 10 The story of Ed Zine's recovery was a surprise a) for his family b) for the doctors c) for his family and the doctors

5 OCD

- Work in groups. What do you know about the causes of obsessive compulsive disorder (OCD)? Have you treated any patients with OCD? Describe the presentation of the disorder.
- 2 Read the text. Answer the questions yes or no.
 - 1 Has a link between OCD and the structure of the brain in sufferers and their near relatives been established?
 - 2 Does a sizeable proportion of the population have OCD?
 - 3 Is the fear of dirt one of the obsessions suffered by patients with OCD?
 - 4 Is OCD inherited?
 - 5 Were only brains of healthy parents of OCD sufferers tested in the Cambridge research?
 - 6 Was the completion of a questionnaire on the computer by the patients part of the research?
 - 7 Did the near relatives of OCD sufferers do better than the control group?
- Give the correct information for the questions in 2 where the answer was no.
- 4 Work in pairs. As quickly as you can, find adjectives in the text which have the same meaning as:
 - 1 unconnected
 - 2 domestic
 - 3 common
 - 4 characteristic
 - 5 recurring
 - 6 comparable
 - 7 enhanced
 - 8 causative
 - 9 fundamental.

Brain pattern associated with genetic risk of OCD

Cambridge researchers have discovered that individuals with obsessive compulsive disorder (OCD) and their close family members have distinctive patterns in their brain structure. This is the first time that scientists have associated an anatomical trait with familial risk for the disorder.



These new findings, recently reported in the journal *Brain*, could help predict whether individuals are at risk of developing OCD and lead to more accurate diagnosis of the disorder.

Obsessive compulsive disorder is a prevalent illness that affects 2–3% of the population. OCD patients suffer from obsessions (unwanted, recurrent thoughts, concerns with themes of contamination and 'germs', the need to check household items in case of fire or burglary, the symmetrical order of objects, or fears of harming oneself or others) as well as compulsions (repetitive behaviours related to the obsessions such as washing and carrying out household safety checks). These symptoms can consume the patient's life, causing severe distress, alienation, and anxiety.

OCD is known to run in families. However, the complex set of genes underlying this inheritability and exactly how genes contribute to the illness are unknown. Such genes may pose a risk for OCD by influencing brain structure (e.g. the amount and location of grey matter in the brain) which in turn may impact upon an individual's ability to perform mental tasks.

In order to explore this idea, the researchers used cognitive and brain measures to determine whether there are biological markers of genetic risk for developing OCD. Using magnetic resonance imaging (MRI), the Cambridge researchers captured pictures of OCD patients' brains, as well as those of healthy close relatives (a sibling, parent, or child) and a group of unrelated healthy people.

Participants also completed a computerized test that involved pressing a left or right button as quickly as possible when arrows appeared. When a beep noise sounded, volunteers had to attempt to stop their responses. This task objectively measured the ability to stop repetitive behaviours.

Both OCD patients and their close relatives fared worse on the computer task than the control group. This was associated with decreases of grey matter in brain regions important in suppressing responses and habits.

Lara Menzies, in the Brain Mapping Unit at the University of Cambridge, explains, 'Impaired brain function in the areas of the brain associated with stopping motor responses may contribute to the compulsive and repetitive behaviours that are characteristic of OCD. These brain changes appear to run in families and may represent a genetic risk factor for developing the condition. The current diagnosis of OCD available to psychiatrists is subjective and therefore knowledge of the underlying causes may lead to better diagnosis and ultimately improved clinical treatments.

'However, we have a long way to go to identify the genes contributing to the distinctive brain structure found in OCD patients and their relatives. We also need to identify other contributing factors for OCD, to understand why close relatives that share similar brain structures don't always develop the disorder.'