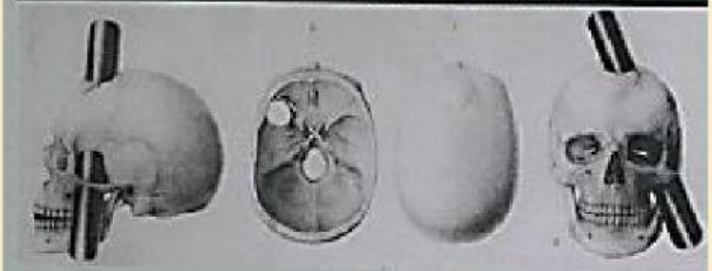
READ THE TWO PASSAGES FROM A SCIENTIFIC JOURNAL. THEN ANSWER THE QUESTIONS ACCORDING TO THE INFORMATION GIVEN IN EACH PASSAGE.

TEXT 1

PHINEAS GAGE: A TEXTBOOK CASE



Unbeknown to Phineas Gage, a terrible brain injury that he sustained in 1848 contributed to the history of neuroscience and psychology. His miraculous survival, and the effects of the injury upon his character, made Gage an important case study for scientists concerned with the brain and human behaviour.

At the time of the accident, 25-year-old Gage was working as a foreman on the construction of a railroad in Vermont, USA. In those days, dynamite was often used to blast away rock and clear a path for the railway. One day, Gage was using a long iron rod to compact explosives into a hole in the rock. Upon hitting the rock, the iron rod produced a spark that ignited the explosives. The subsequent blast propelled the rod through Gage's left cheek, tore through his brain and exited through the top of his skull, landing some ten metres away.

Fearing the worst, his family made funeral arrangements. Against all odds, however, after initially slipping into a semicomatose state, Gage recovered, physically at least. Mentally though, his injury appeared to have produced a dramatic change in his personality. From being well-liked and successful, he became rude, aggressive and socially inappropriate. According to his friends and acquaintances, he was no longer himself. Although he lost his position as a foreman, he managed to hold down other jobs, but died twelve years later following a series of epileptic seizures.

In modern psychology his condition is known as post-traumatic social disinhibition acquired as a result of the damage to the frontal lobe. We now know that this part of the brain is our emotional control centre and home to our personality. It is involved in a whole range of high-level cognitive functions, such as decision-making, planning, inhibiting inappropriate behaviour, social interaction, understanding other people and self-awareness. However, in the nineteenth century, scientists were struggling to understand these connections. Gage's injuries provided the first solid evidence for a link between brain trauma and personality change.

Today, research is still being conducted into his condition and the majority of introductory psychology textbooks mention Gage. His skull and the iron rod are on display at the Warren Anatomical Museum at Harvard University and are the most sought-out items there.

TEXT 2

What is positive development?

A ground-breaking 30-year study into childhood temperament and its impact on adult behaviours, conducted by the Australian Institute of Family Studies (AIFS), tracked the progress and well-being of more than 1,000 children from infancy to their late twenties.

Many studies collect data about what goes wrong in young people's lives, and this information is invaluable, but it is only part of an intricate mosaic. The AIFS researchers are keenly interested in what is going right in the lives of young adults. Much of their research is devoted to looking at young people's successes and skills, and evidence that they are thriving. This is called positive development.

Positive development is not simply the absence of problems, but involves achieving optimal development and wellbeing. In measuring positive development in young people, researchers look for attributes and behaviours that enable them to take an active role in the community; be trusting and tolerant of people in society, especially those from different backgrounds; have confidence that important organisations in society would generally behave ethically and fairly; be responsible and empathetic in their relationships with others; and feel satisfied with their life and where it is heading. Young people high in these qualities are considered to be developing positively and functioning well.

Equally important to researchers is which determinants earlier in life help people to develop these strengths and thrive as young adults. To answer this, they looked back to the data the young people and their families had provided when they were children and adolescents. They found that young people who thrived later on in life tended in childhood and adolescence to have experienced strong family relationships, strong relationships with their peers, better adjustment to life at school, better control over their emotions, and an interest in community involvement. The study concluded that all of these experiences are assets in helping young people to flourish as they become adults.

The findings are an invaluable resource for developing interventions and programmes that reduce risks and also strengthen protective factors to assist optimal development.

LIVEWORKSHEETS

Read the two passages from a scientific journal, then answer questions according to the information given in each passage.

Text 1

1 What is the main purpose of the passage?
   a to provide an introduction to psychology
   b to explain how the human brain functions
   c to show how an accident led to a breakthrough
   d to describe the limitations of nineteenth century scientists

2 According to the passage, what happened to Gage during the accident?
   a The exploding rock hit his head.
   b He was injured by the dynamite.
   c He was thrown a distance of ten metres.
   d The rod went straight through him.

3 As a consequence of his injury, Gage
   a displayed a loss of social inhibitions.
   b was unable to find other employment.
   c immediately suffered seizures that led to his death.
   d no longer had any friends.

4 What can be inferred from the last paragraph?
   a Gage's brain has become a popular exhibit.
   b Fascination with Gage continues.
   c His condition still baffles scientists.
   d Many books have been written about him.

Text 2

5 What is the passage mainly about?
   a examining individual growth
   b overcoming problems
   c the benefits of long studies
   d ways of researching behaviour

6 In the second sentence of paragraph 3, to what does the word them refer?
   a researchers
   b attributes
   c behaviours
   d young people

7 According to the passage, what can be inferred about young people who are not developing positively?
   a Many of their relationships are troubled.
   b They possibly lack faith in the authorities.
   c There is little that can be done for them.
   d They possess no positive attributes.

8 What will the results of the study likely lead to?
   a better parenting
   b improved peer relationships
   c methods for assisting some children
   d suggestions for further research

LIVEWORKSHEETS