

Phineas gage

Psychology



**ASSIGN
BUSTER**

Phineas Gage, a foreman on the railroad in Cavendish and is probably the most famous person to have survived damage to the brain. Before the accident he had been their most capable and efficient foreman, one with a well-balanced mind, and who was looked on as a shrewd smart business man. He was now, Harlow said, fitful, irreverent, and grossly profane, showing little deference for his fellows. He was also impatient and obstinate, yet capricious and vacillating, unable to settle on any of the plans he devised for future action.

His friends said he was " No longer Gage. " His intellect however remained intact after the accident. It was evident that Gage had experienced a character and personality shift. He had lost the balance between " his intellectual faculty and animal propensity". The fact established through Gage's experience is that observing social convention, behaving ethically, and making good life choices requires knowledge of strategies and rules that are separate from those necessary for basic memory, motor and speech processing.

Even more startling, it appeared as though there are systems in the brain dedicated primarily to reasoning. It was obvious from looking at Gage's skull that the rod had pierced through the very front part of the brain, but at the time no one knew very much about the sort of processing that occurs in this region. Gage's accident seemed to suggest that the prefrontal cortex controls decision making, especially in social situations, and has a great deal of influence on temperament and emotion.

The damage to the frontal lobe of Gage is predominantly the sole cause of his emotional blunt. The prefrontal cortex is an association area of the brain, which means that it integrates many processes from other brain regions, including those specialized for memory and emotion. Damage to the prefrontal cortex does not disrupt the basic function of sensory, memory or emotional systems; it disrupts a person's ability to synthesize these systems and produce organized social behavior.

Gage's case was among the first indications that the brain is not just specialized for walking, talking and the like, but also contains regions tailored for more complex behaviors such as reasoning, adapting to social convention and planning future events. Gage's story will be forever remembered as a peek into how three pounds of gray matter somehow combine to make us uniquely human, and each human unique.