

Gustav Fechner (1801–1887)

Fechner explored further the relation between sensations and perceptions. He did not believe that science and mind were mutually exclusive. There was no compelling reason why mind should be reduced to matter as was being done in physiology (Hergenhahn, 2001). Fechner held to the idea of *panpsychism*, that consciousness was just as prevalent as matter and that consciousness could not be separated from physical things. In this he supported the double aspectism of Spinoza—all things are both physical and conscious. As a result, Fechner aimed to solve the mind/body problem in ways that would satisfy materialist scientists. The difficulty for him was that it was easier to propose a relation between mind and body than it was to demonstrate it. His solution was to demonstrate a systematic relationship between physical events and mental experience. The result was the creation of *psychophysics*.

Fechner developed three different methods to explore sensory thresholds. With the *method of limits* subjects are asked to identify minimal changes in stimulus values. A stimulus was varied and compared with a standard. The aim was to identify the range of stimuli considered equal to the standard. With the *method of constant stimuli*, a stimuli of different intensities are presented, along with a standard stimulus, and reports are obtained about whether it appears to be greater than, lesser, or equal to the standard. Lastly, the method of adjustment: an observer adjusts a variable stimulus until it appears to be equal to a standard stimulus.

Reference

Hergenhahn, B. R. (2001). *An introduction to the history of psychology* (4th ed.). Belmont, CA: Wadsworth/Thomson Learning.