Mental imagery is helpful to humans

Mental Imagery is a process used every day that resembles true sensory perception, but works without direct sensory stimuli. This takes the form of visual, spatial, and emotional inner representations of perceptual information manipulated in memory. I argue that mental imagery is helpful to humans, as it seemingly allows us to mentally manipulate and evaluate present situations to prepare for future benefit. I will show how mental imagery is involved in daily working memory tasks, the balance and influence of emotional states, and benefits in humans with motor or cognitive impairment.

Imagery allows humans to conduct working memory tasks to help adapt to different situations. The most widely-accepted models of working memory outline the visuospatial sketchpad’s role in manipulating stored information from the world, such as mentally rotating 3D objects. Humans rely on this mechanism during navigation; we use our memories to create mental maps of a targeted area, and mentally navigate through it to find our intended destination from our initial location. Although GPS systems do this job, mental imagery allows humans to adapt to changing conditions, and find more efficient ways that may not be captured by the system.

There is also a connection between how positive mental imagery can benefit one’s future emotional and physical state. Much research involving emotions and imagery are encompassed around the idea that positive imagery can lead to one’s overall well-being in one’s life. Mentally placing an emotionally positive state in one’s head, or imagining a difficult task being completed, has proven to be associated with quantifiers of overall well-being, such as good physical and mental health.

The benefits of mental imagery extend to humans with motor and cognitive impairments, showing how manipulation during imagery can overcome physical perceptual losses. Researchers have discovered the use of guided imagery in helping bring back functionality in stroke patients with motor impairments. Even patients in a vegetative state have shown evidence of responding to mental imagery tasks through fMRI imaging, which allows doctors to communicate with these people through simple binary questioning.

All imagery examples provided have displayed mental manipulations of sensory information that guide a future positive outcome. These examples apply to daily life, as displayed by navigation working memory tasks, and imagining positive affect to improve general well-being. Imagery is also beneficial to patients with cognitive and motor impairments, allowing patients who cannot physically communicate or move, to improve their situation. Mental imagery aids the preparation for one’s future benefit.

References: