# Chapter 17 Stress, Memory, and Memory Impairment

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Table 1

Working Definitions of Memory Systems and Processes

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| Autobiographical memory | Autobiographical memories are semantic memories of biographical facts that store some of the episodic memory content with its spatiotemporal context, and allow for extensions, modifications, integrations, and de-emotionalizations of knowledge through the semantic memory system. |
| Consolidation | Memory consolidation is the slow protein synthesis dependant stabilization process of novel events that occurs post initial encoding, and leads to the formation of a memory trace. |
| Encoding | Encoding refers to the first critical step in creating a new memory. Perceived items of interest are converted into a construct that it is stored in the brain. If adequately “encoded” it can be recalled at a later date. |
| Episodic memory | Episodic memory refers to memory of an event or episode. The episodic memory is a storage system that receives highly detailed multimodal information about past personal experiences including their spatiotemporal context, internal state of the person's emotions, perceptions and thoughts, and the ability to engage in episodic future thinking. |
| Explicit memory | Explicit memory (sometimes referred to as declarative) consists of systems that involve conscious recollections of previous experiences.8 Declarative memory is divided into episodic and semantic memory. |
| Implicit memory | Implicit memory (sometimes termed nondeclarative) is a nonintentional form of memory that impacts on the person without their conscious awareness. Priming tasks are most often employed to investigate implicit memory.8 |
| Procedural memory | Procedural memory is a memory storage system of skills usually acquired through repetition and practice. |
| Reconsolidation | Recalled or reactivated consolidated memories can, under specific conditions, reenter a labile state requiring protein synthetic restabilization. This process is termed reconsolidation. |
| Semantic memory | Semantic memory refers to our general knowledge and facts, and is shared with others. |
| Sensory memory | Sensory memory allows the retention of incoming sensory information for a short period of time after incoming stimuli have ceased. |
| Working memory | Working memory refers to a temporary storage (several seconds) system that maintains and manipulates information.3 |