

# [This in the short-term memory model originally](https://assignbuster.com/this-in-the-short-term-memory-model-originally/)

Thisarticle first speaks of Baddeley and Hitch’s three-component model of workingmemory and how certain phenomena are not properly documented by their originalmodel. The article outlined these issues and presented a fourth model to beadded to support the original model. The episodic buffer was said proposition. Thearticle a good job highlighting the original’s strengths, such as thephonetical loop, while also going into why we need the addition of the newfourth component.              The first part of the article goes into the workingmemory model and why it was initially proposed to begin with. Baddely and Hitchsaw errors in the short-term memory model originally typified by Arkinson andShiffrin.

They saw issues concerning long-term memory and how in patients withpoor short-term memories, it was still normal. Thus, they proposed their three-partmodel comprised of the central executive and its two slave systems. Their models’best component was the phonological loop. This is mostly related to short-termmemory and recalling information, such as sequences.             The issues that were found in the working memory modelwere tested with prose recall, rehearsal, and conscious awareness.

In the proserecall test, which is a test relied upon in many clinical tests, patients are usingchunking methods to remember 15-20 ideal units. Testing on patients show thatchunking may be relying on long-term memory as well as short-term. Even inpatients with memory issues, their ability for immediate recall exceeds thatability that the phonetical loop can provide. They seem to activate their long-termmemory temporarily, as preserved immediate recall seems to require some memoryor the proper functioning of the central executive system. Subvocal rehearsalis a skill we have as children and perform unconsciously when attempting torecall a sequence. The phonological loop assumes storage and rehearsal are separatebut when not allowed to utilize rehearsal on a test, their results suffer agreat deal.

The testing so far has shown that the visual and verbal slave systemsin the working memory model does account for a lot of data, evidence frompatients with short-term memory issues, suggest that they still utilize an areaof their mind that recalls on their long-term memories. This is where theepisodic buffer comes in to fill the gap left in the original working memory model.            The episodic buffer is controlled by the centralexecutive and serves as an interface between systems that allows the workingmemory to retrieve information from long-term memory. While being like Tulving’sepisodic memory model, the episodic buffer can still be utilized by patientswith impaired amnesia. The buffer is however limited in its capacity toremember, as its multi-dimensional code cannot access every part of memory. Thischanges the model of working memory to a multi-component one that does notsolely rely on activated consciousness.

It is not without flaws, as it is hardto separate from other systems. It can be hard to draw the line between theother slave systems and even harder to do so when compared to episodiclong-term memory. To see the difference at all, extensive neuroimaging andtests have to be ran on those rare patients with severe memory disabilities. Much more testing needs to be done on memory before the buffer is perfected, but for now, it remains a vital addition to the working memory model.             I found this article to be very well written.

I found theaddition to be huge in the working memory field, as it explains so much aboutour working memories’ connection to our long-term memory. After seeing the abilitiesof the episodic buffer, I cannot imagine a working memory model without it. Themulti-connection models make so much sense, as I never assumed memory was socut and clear. With how much more we need to learn, it is impossible to notfind flaws, but discoveries like this are huge steps in the right direction.