

## The role of autonomic arousal in feelings of familiarity

Alison L. Morris      Anne M. Cleary      Mary L. Still

Subjective feelings of familiarity associated with a stimulus tend to be strongest when specific information about the previous encounter with the stimulus is difficult to retrieve (e.g., the butcher-on-the-bus phenomenon; [Mandler, G. (1980). Recognizing: The judgment of previous occurrence. *Psychological Review*, 87, 252–271.]). When a stimulus has been encountered previously and the circumstances of the encounter cannot be recollected, additional cognitive resources may be directed toward recollection processes; this resource allocation is accompanied by autonomic arousal [Dawson, M. E., Filion, D. L., & Schell, A. M. (1989). Is elicitation of the autonomic orienting response associated with allocation of processing resources? *Psychophysiology*, 26, 560–572]. One easily measurable index of autonomic arousal is the skin conductance response (SCR). In the present study, participants studied lists of words and then gave recognition ratings to briefly displayed and masked studied and nonstudied test words while their SCRs were monitored. Results revealed a relationship between recognition ratings and the temporal characteristics of the SCR, supporting the idea that feelings of familiarity are indeed “feelings” in that they stem from autonomic arousal associated with cognitive resource allocation.