

Figure S1. At the right are sample trials from the congruent and incongruent conditions of the Stroop color-word task and multi-source interference task (MSIT). Each task consists of four congruent blocks of trials alternated with 4 blocks of incongruent trials. In the Stroop Task, participants are instructed to identify the color of a target word presented in the center of the visual display by selecting 1 of 4 identifier words below the target word. Participants make their selection by pressing 1 of 4 buttons in a response glove with each button corresponding to the location of the identifier word on the screen (thumb button 1 = word on the far left; ring finger 4 = word on the far right). Congruent trials consisted of (1) a target word in a color congruent to the word, e.g. the word “red” in red ink, and (2) all identifier words in the same color as the target (**Panel A**, in which the correct response would be to press the thumb button to correspond to ‘red’). Incongruent trials consisted of (1) a target word in incongruent color ink, and (2) all identifier words in colors incongruent with their meaning (**Panel B**, in which the word ‘blue’ is in the color red, therefore the correct response would be to press the thumb button to select the word ‘red’).

The MSIT involves identifying the number that is different from the other numbers in a visual display, and indicating the selection by pressing one of three buttons on the response glove. This time, the buttons in the glove correspond to a specific number in the display (thumb button 1 = number 1, index finger button number 2 = number 2, middle finger button 3 = number 3). For congruent trials, the target number in the display appeared in a location compatible with its location on the glove (**Panel C**, in which the target number ‘1’ is on the far left requiring the participant to press the thumb button one on the response glove). Incongruent trials contained a number appearing in a position that was incompatible with its spatial position on the response glove (**Panel D**, in which the target number ‘3’ appears in the middle position, requiring the participant to suppress the tendency to press the index finger button, but rather to press the middle finger button on the glove).

During the incongruent condition of both tasks, accuracy was titrated and maintained at ~50% by modifying the inter-trial intervals (ITI). More accurate performance within a given incongruent condition prompted shorter ITIs and a shortened time to respond, whereas less accurate performance lengthened the ITIs. To control for motor response differences between incongruent and congruent conditions in both tasks, the number of trials presented in the congruent condition was yoked to the number of trials completed in the incongruent condition. To implement this procedure, (1) a block of incongruent trials was administered first, and (2) congruent condition trials were administered at an ITI that was determined by the participant’s mean ITI of the preceding incongruent block. Participants received task instructions and practiced both tasks on a computer before MRI scanning, but performance was not titrated during practice. Participants were not informed that performance would be titrated in the incongruent condition during the MRI protocol. Both tasks have been used successfully in past experiment to evoke cardiovascular reactivity (e.g., Gianaros et al., 2009c).

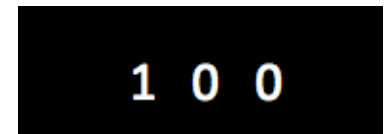
Panel A



Panel B



Panel C



Panel D

