**Supplemental Digital Content**

**Details on the Paper Matching Process**

To be considered sex-matched, papers were required to have male and female participant compositions within ten percent of the V-TSST papers. For V-TSST studies with 100% male or female participants, match papers were required to match the sex exactly (i.e., match papers also had to have 100% male or female participants). To be considered age-matched, papers were required to have participants with a mean age within five years (i.e., ±5 years) of the V-TSST population. One exception was made in which a very specific population needed to be matched (i.e., females in their luteal cycle of the menstrual phase; Montero-López et al., 2018), and the mean ages differed by 5.8 years. This decision was made because phase of menstrual cycle seems to have a more drastic effect on cortisol reactivity in than age (Allen et al., 2014), therefore matching the menstrual cycle was considered more important than matching women who were closer in age.

Sex- and age-matched papers were identified using these inclusion and exclusion criteria. Narrowing the search to the same publication year was successful for finding sex- and age-matched participant populations for nine of the 13 V-TSST papers that needed a match paper. For the remaining papers, the publication date range was widened to include one year before and one year after. For example, a traditional TSST study with participant populations that had similar sex and age characteristics could not be found to match (A. S. Santos-Ruiz et al., 2010), so the publication date search range was increased to years 2009 – 2011. This method of expanding the year of publication range was effective for identifying matching papers for all but two V-TSST studies.

For two papers, the populations were more difficult to match. The healthy control subgroup of Jönsson et al. (2015) included 50% men and 50% women with a mean age of 49.2 years old. This proved to be a rare combination in the traditional TSST literature. To find a matching population, the search criteria in PubMed were narrowed to include Middle Aged (40-65 years old) participants and the limit on publication date was removed. Papers were searched from newest to oldest until a match paper was found that met the aforementioned criteria. For Montero-López et al. (2018), a matching traditional TSST paper needed to have female-only participants similar in age to 33 years old who were in the luteal phase of their menstrual cycle. To find this match paper, the limit on publication date was removed and the key word “luteal” was added, and a match was successfully found after removing the year restriction and adding the keyword.

This matching process was initially completed for papers examining cortisol reactivity, as all V-TSST studies that met inclusion criteria included cortisol as an outcome variable. A number of V-TSST papers also examined HR reactivity (*n* = 7) and SRS reactivity (*n* = 8). SRS reactivity included any self-report measure that is sensitive to changes under stress (e.g., State-Trait Anxiety Inventory; Marteau & Bekker, 1992). When possible, the same papers that were found during the initial matching process were used for these variables as well. For example, Jonsson et al. (2015) included cortisol, HR reactivity, and SRS reactivity. The match paper for this study also included all three variables of interest, so it was used for all meta-analytical comparisons (Buchanan et al., 2010). When necessary, additional match papers were found using the key words “heart rate” or “stress.” For this reason, several V-TSST papers have more than one match paper in order to run meta-analyses for the different variables of interest. Details of each study are summarized in Table 1.

Of note, several V-TSST papers have been published since the authors’ first meta-analysis on this topic (i.e., Helminen et al., 2019). These papers have been added to the pool of V-TSST studies that have examined cortisol reactivity. Additionally, in the first meta-analysis we used a subsample from Shiban et al. (2016) that included only the cortisol responders in accordance with the criterion set forth by Miller et al. (2013). However, in this meta-analytical comparison, we used the full sample from both the V-TSST group and the traditional TSST group from Shiban and colleagues (2016) for a more conservative comparison.