Background and Significance

In line with RDoC and related initiatives, psychophysiological research has begun to combine multiple physiological and self-report measures in attempts to better index constructs relevant to psychopathology and individual differences in emotion. Reports of null correlations between different psychometric tools and between physiotherapy and self-report have been reported for decades; however, assumptions continue to be made that various psychophysiological tasks are measuring the same constructs (e.g., negative affect, trait fear). We need more careful evaluations of the covariations of various methods and measures to better understand the ability of indexes to index constructs of interest.

These efforts may be most successful if they include data from both multiple measures and tasks within the same large samples. Here, we observed two psychophysiological measures among two psychophysiological tasks administered to a large sample. We also administered an array of self-report questionnaires for the various psychophysiological tasks across sessions. We then combined exploratory factor analysis to test evidence for underlying constructs of emotion.

General Procedures

Healthy participants n = 130. 84 females aged 18-34, 46 males aged 18-60. Participants completed both the shock Predictable-Noise (PNP) task and the Interpersonal Aversive Picture Scale (IAPS) task in 3 sessions that were separated by one week. The final sample consisted of 179 participants after exclusion of 10因为 non-response and 13 because of missed data. Participants were randomized to a Task Order (PNP task or IAPS task) for both study visits. Before the NPU task at the first visit, participants reported their maximum tolerated shock level. This was fixed at the beginning of each session. Each participant’s maximum tolerated shock level was used in the NPU task to minimize the effect of individual differences in shock tolerance.

At the first study visit only, participants completed a battery of self-report questionnaires to assess trait negative affect.

Exploratory Factor Analysis

We conducted an exploratory factor analysis to test for evidence that the independent variables could be adequately represented by a small number of factors. All variables are inter-correlated. The first factor represented the overall negativity of the factors, and the second factor represented the overall optimism of the factors. The third factor represented the overall variability of the factors. The fourth factor represented the overall variability of the factors. The fifth factor represented the overall variability of the factors. The sixth factor represented the overall variability of the factors. The seventh factor represented the overall variability of the factors. The eighth factor represented the overall variability of the factors. The ninth factor represented the overall variability of the factors. The tenth factor represented the overall variability of the factors. The eleventh factor represented the overall variability of the factors. 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