**Stress Appraisals of Acute Stress (SAAS)**

Instructions:

1. The first questionnaire is used as a pre-task appraisal assessment and is given immediately before a task begins, but after instructions are provided so participants know what the task is, but have not done it yet.
2. The post-task questionnaire is given immediately after the task.

In general, we find pre-task appraisals are more predictive of physiologic responses during the first minute of the task. Post-task appraisals tend to be more correlated with personality measures like neuroticism.

**PRE-TASK**

**Please indicate by circling a number after each statement to indicate how you are feeling right now regarding the task you are about to complete.**

Strongly Strongly

Disagree Neutral Agree

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1. The upcoming task is very demanding.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I am very uncertain about how I will perform during the upcoming task.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. The upcoming task will take a lot of effort to complete.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. The upcoming task is very stressful.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I have the abilities to perform the upcoming task successfully.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. It is very important to me that I perform well this task.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I’m the kind of person who does well in these types of situations.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. A poor performance on this task would be very distressing for me.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I expect to perform well on this task.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I view the upcoming task as a positive challenge.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I think the upcoming task represents a threat to me.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I feel as if I am in complete control of my performance
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

**POST-TASK**

**Please indicate by circling a number after each statement to indicate how you are feeling right now regarding the task you have just completed.**

Strongly Strongly

Disagree Neutral Agree

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1. The task was very demanding.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I am uncertain about how I performed.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I exerted a lot of effort during the task.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. The task was very stressful.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I felt that I had the abilities to perform well in the task.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. It was very important to me that I performed well this task.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I believe I performed well on the task.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I felt that the task challenged me in a positive way.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I felt threatened by the task.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I felt in complete control during the task.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

**Scoring:**

**Demand items are highlighted in red; Resource items in green.**

1. Check the alpha of the demand and resource items. Only create scales of items that hang together > .70. The typical item that tends not to result in a high alpha that we end up dropping from the resource scale is the control item (#12). We have kept this in the scale simply because it theoretically should be part of resources.
2. Threat ratio is created by diving demands by resources (demands/resources). Others have subtracted: demands – resources.
3. Items #9, #10 and #11 are not part of demands and resources. Expectations are considered separately, and the questions that ask whether participants felt “challenged” or “threatened” were added to demonstrate that the common language labels attached to these categories based on Lazarus and Folkman’s theory, do not translate into the same responses as the indexes of demands and resources. Researchers are advised not to use the common language questions if they are trying to differentiate “challenge” and “threat” stress states.

 **(PRE-TASK)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1. The upcoming task is very demanding.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I am very uncertain about how I will perform during the upcoming task.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. The upcoming task will take a lot of effort to complete.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. The upcoming task is very stressful.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I have the abilities to perform the upcoming task successfully.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. It is very important to me that I perform well this task.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I’m the kind of person who does well in these types of situations.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. A poor performance on this task would be very distressing for me.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I expect to perform well on this task.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I view the upcoming task as a positive challenge.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I think the upcoming task represents a threat to me.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I feel as if I am in complete control of my performance.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

**(POST-TASK)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1. The task was very demanding.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I am uncertain about how I performed.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I exerted a lot of effort during the task.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. The task was very stressful.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I felt that I had the abilities to perform well in the task.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. It was very important to me that I performed well this task.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I believe I performed well on the task.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I felt that the task challenged me in a positive way.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I felt threatened by the task.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. I felt in complete control during the task.
 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

**When citing this measure\*, use:**

Mendes, W. B., Gray, H., Mendoza-Denton, R., Major, B. & Epel, E. (2007). Why egalitarianism might be good for your health: Physiological thriving during stressful intergroup encounters. Psychological Science, 18, 991-998.

\*Note, this article is not a scale development article, but rather the first published article that used this scale. Many published papers have followed using this scale (see references).

**The measure has been used in the following publications:**

Akinola, M. & Mendes, W. B. (2008). The dark side of creativity: Biological vulnerability and negative emotions lead to greater artistic creativity. Personality and Social Psychology Bulletin, 34, 1677-1686.

Akinola, M. & Mendes, W. B (2014). It’s good to be the king: Neurobiological benefits of higher social standing. Social and Personality Psychological Science, 5, 43-51.

Aschbacher, K., Derakhshandeh, R. Flores, H., Narayan, S., Mendes, W. B., & Springer, M.L. (2016). Circulating angiogenic cell function is inhibited in vitro and associated with psychological stress and cortisol in vivo. Psychoneuroendocrinology, 67, 216-233.

Aschbacher, K., Epel, E., Wolkowitz, O.M., Prather, A., Puterman, E., Dhabhar, F., 2012b. Maintenance of a positive outlook during acute stress protects against pro-inflammatory reactivity and future depressive symptoms. Brain Behav. Immun. 26, 346–352, http://dx.doi.org/10.1016/j.bbi.2011.10.010.

Aschbacher, K., O’Donovan, A., Wolkowitz, O.M., Dhabhar, F.S., Su, Y., Epel, E., 2013. Good stress, bad stress and oxidative stress: insights from anticipatory cortisol reactivity. Psychoneuroendocrinology 38, 1698–1708, http://dx.doi.org/10.1016/j.psyneuen.2013.02.004.

Jamieson, J. P., Mendes, W. B., & Nock, M. K. (2013). Changing the conceptualization of stress in social anxiety disorder: Affective and physiological consequences. Clinical Psychological Science, 1, 363-374.

Jamieson, J. P. & Mendes, W. B. (2016). Social stress facilitates risk in youths. Journal of Experimental Psychology: General, 145, 467-485.

Jamieson, J. P., Nock, M. K., & Mendes, W. B. (2012). Mind over matter: Reappraising arousal improves cardiovascular and cognitive responses to stress. Journal of Experimental Psychology: General, 141, 417- 422.

Kassam, K., \*Koslov, K., & Mendes, W. B. (2009). Decisions under distress: Stress profiles influence anchoring and adjustment. Psychological Science, 20, 1394-1399.

Koslov, K., Mendes, W. B., \*\*Patjas, P., & Pizzagalli, D. A. (2011). Asymmetry in resting intracortical activity as a buffer to social threat. Psychological Science, 22, 641-649.

McLaughlin, K. A., Sheridan, M. A., Alves, S., & Mendes, W. B. (2014). Child maltreatment and autonomic nervous system reactivity to psychosocial stress: Identifying dysregulated stress reactivity patterns using the biopsychosocial model of challenge and threat. Psychosomatic Medicine, 76, 538-546.

Mendes, W. B., Gray, H., Mendoza-Denton, R., Major, B. & Epel, E. (2007). Why egalitarianism might be good for your health: Physiological thriving during stressful intergroup encounters. Psychological Science, 18, 991-998.

O’Donovan, A., Tomiyama, A. J., Lin, J., Puterman, E., Adler, N. E., Kemeny, M., ... & Epel, E. S. (2012). Stress appraisals and cellular aging: A key role for anticipatory threat in the relationship between psychological stress and telomere length. Brain, behavior, and immunity, 26(4), 573-579.