

Individual Differences in Reactivity to the Trier Social Stress Test: A Literature Review



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INTRODUCTION

- The TSST is an acute stress protocol designed to induce a stress response in human subjects (Allen et al., 2014).
- Individuals react to psychosocial stressors in diverse ways depending on their appraisal (Lazarus & Folkman, 1984).
- Individual differences might explain differences in reactivity to the TSST (Miller & Kirschbaum, 2019).

METHODS

- I used these terms in my search for literature: **Psychosocial Stress, Acute stress, Cortisol reactivity, HPA Axis reactivity, and Trier Social Stress Test**
- I reviewed the literature on laboratory-based studies, which used the TSST in Europe and North America.
- I used the John Jay library to retrieve articles.

RESULTS

I reviewed 13 studies that used the TSST.

There are different ways of **measuring reactivity** to the TSST:

Psychological Reactivity	Physiological Reactivity
The Primary Appraisal Secondary Appraisal scale (PASA)	Cortisol Reactivity
Perceived Stress Reactivity Scale (PSRS)	Cardiovascular Reactivity
Positive and Negative affect scale (PANAS)	Hypothalamic-pituitary-adrenal (HPA) Axis Reactivity

What factors explain individual differences in reactivity to the Trier Social Stress Test?



RESULTS CONTINUED

The studies observed correlates of reactivity to the TSST. These can be broken down into these 6 types of correlates:

Correlates
1. Non-English Speaking Countries – Higher Cortisol Responses.
2. Strong Perceived Emotional, Cognitive and Autonomic Responses to Social Evaluative Stress – Higher Cortisol Responses
3. Occupational Role Stress and Role Uncertainty – Higher Cortisol Reactivity to Acute Stress
4. Childhood Trauma – Higher Cortisol Reactivity
5. Sex Differences – Men Higher Reactivity to TSST than Women.
6. Implicit/Explicit Social Support – European Americans Exhibited Higher Psychological Distress and Cortisol Responses in the Implicit-Support Condition.

DISCUSSION

- The TSST is widely used to induce a stress response, however the public speech might have a different psychological effect depending on the individual.

REFERENCES

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