Fear and Disgust During a Vasovagal Episode

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INTRODUCTION

- A Vasovagal Reaction (VVR) is a physiological response, often experienced as a result of encountering blood, injury, and injection cues, that can produce a range of feelings of weakness, dizziness, lightheadedness up to fainting (Page, 1994).
- Because of VVR people avoid donating blood and they are discouraged from seeking proper medical attention (Kleinkecht & Lenz, 1989).
- What happens during a vasovagal episode? The classical view suggests a diphasic process of ↑HR & ↓BP followed by vasodilation, ↓HR & ↑BP; however, this theory has been recently challenged (Ritz, Meuret, & Ayala, 2010).
- The two main emotions thought to be involved in VVR are fear and disgust.
- Vasovagal symptoms have been positively correlated with disgust sensitivity and fear of seeing and experiencing blood loss (Page, 2003; Ditto, Gilchrist, & Holy, 2012; Kleinkecht, & Lenz, 1989). However, because of mixed findings the results are not reliable.
- The discrepancy in results may be caused because the previous studies looked only at a limited number of psychophysiological parameters.

METHODS

- Sample: 60 healthy adults between the ages of 18 and 30 were exposed to five videos of approximately five minutes each, with different emotional content.
- Procedure:
  - Baseline Questionnaires
  - Video Exposure (Physiological Recording)
  - Repeat Questionnaires after each video
  - Video Exposure
- Measures:
  - Neutral (documentary)
  - Fear (“The Shining”)
  - Disgust (“Trainspotting”)
  - Mulitilation video (surgery)
  - Injections (“The Exorcist”)
  - Autonomic and cardiovascular activity was assessed using polygraph- and impedance cardiography-based measures: blood pressure, heart rate, stroke volume, cardiac output, total peripheral resistance, pre-ejection period, skin conductance, respiration rate.
  - Self-report measures looked at vasovagal symptoms, disgust sensitivity, and anxiety level, both pre- and post-video.

CURRENT STUDY

- The current study was conducted in order to look at the psychophysiological activity that occurs during a vasovagal episode in comparison with the psychophysiological activity typical to the emotions of disgust and fear.
- Research Question:
  - Is the psychophysiological activity during a vasovagal episode similar to that of the emotions of fear or disgust?

Case Study

- The case study presents the physiological activity of a participant who experienced a clear vasovagal reaction during the surgery video.

REFERENCES