



# Identifying Error Rates in Suppressed Emotions During Training

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## INTRODUCTION

Veracity proprietary psychophysiological stress analysis algorithms reveal attempts to deceive. Individuals take baseline questions on an electronic tablet where touch response is measured by microtremors. Each response is analyzed to identify involuntary, heightened physical responses known as Significant Psychophysiological Responses (SPRs). This has multiple benefits in helping people understand their emotions in certain situations.

Veracity was utilized in the testing military medical students by measuring students' attempts to conceal their true feelings and emotions after simulated stressful situations.

## RESULTS

26/32 (81%) admitted nervousness and 27/32 (84%) were aware of physical manifestations of anxiety. When asked how they performance compared to other students, 13/32 (41%) were honest in believing their performance was below peers. 19/32 (59%) admitted they made impulsive decisions. Questions specifically about perceived stress showed 5/32 (16%) dishonest when asked if they thought the exercise was not stressful. 6/32 (19%) scored SPR when asked if they were unable to tolerate the stress associated with the exercises

Question	Percentage
Admitted Nervousness	81%
Aware of Anxiety Signs	84%
Performance Below Peers	41%
Dishonest About Non-Stressful Exercise	16%
Unable to Tolerate Stressors of Exercise	19%



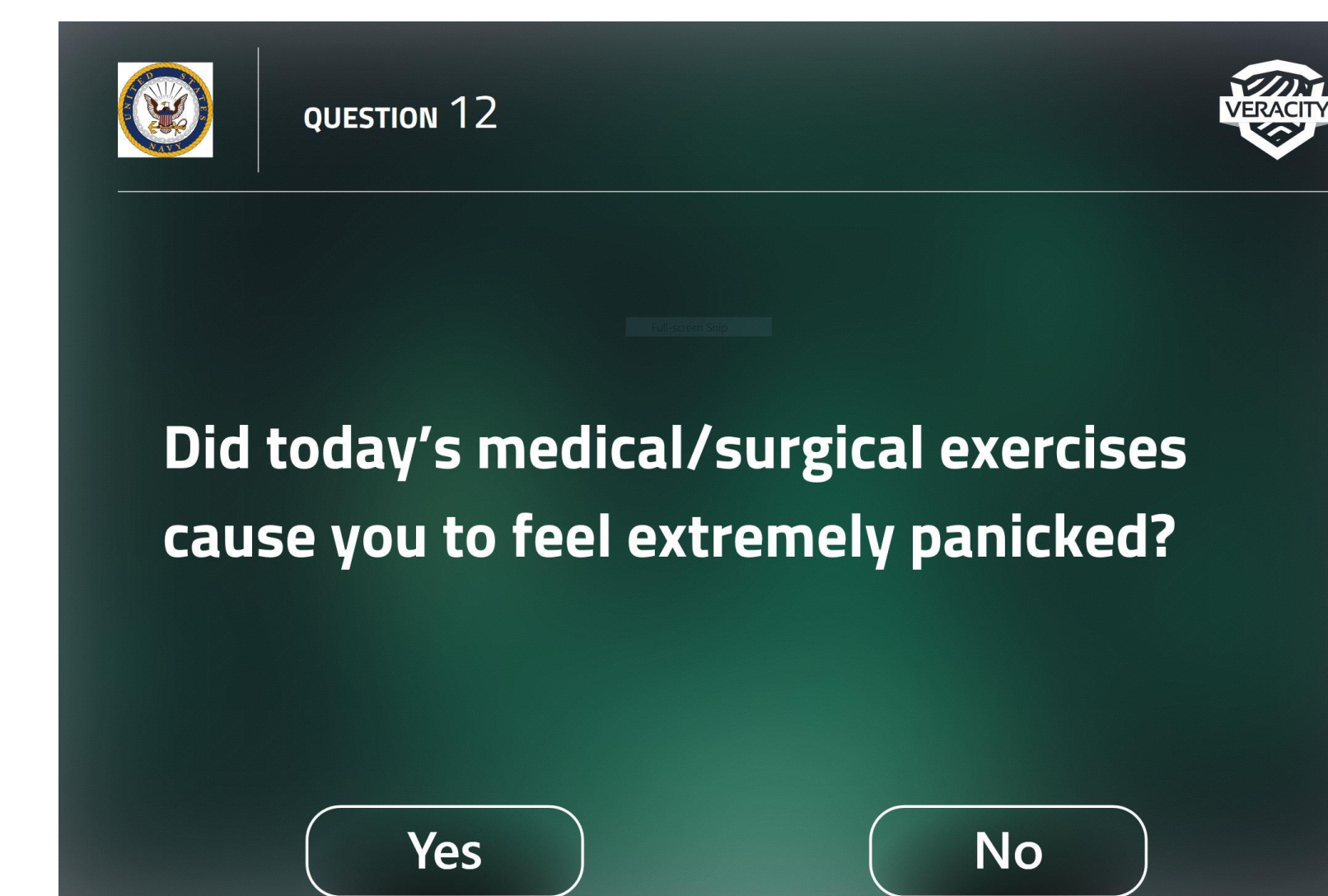
Simulated Medical Treatment at STOPS, San Diego, CA

## CONCLUSION

Students were more likely to admit to their emotions or behavior than lie. However, questions specifically addressing their perceived stress level showed more were likely to be dishonest. Veracity's tests were very effective in determining which students do not fully disclose their emotional state. Additional training or counseling could significantly increase students' emotional awareness, improving their ability to withstand stress when it is most critical to perform.

## METHODS

32 students participated in training of simulated trauma with catastrophic injuries. Afterwards, eighteen questions identifying emotional intelligence and stress levels were presented on a tablet (Figure 1). Answering "yes," translated to "Admits", indicating honesty in their response. Answering "no" meant either the student was telling the truth or trying to deceive. Based on the subject's response to earlier baseline questions, Veracity can differentiate between the truth and an attempt to deceive.



Example Veracity Question



Simulated Scenario at STOPS, San Diego, CA