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CARDIOVASCULAR EMOTIONAL DAMPENING AND BLOOD PRESSURE: IS THERE A RELATIONSHIP BETWEEN DIASTOLIC BLOOD PRESSURE & RISK-TAKING





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Introduction

Persons with higher blood pressure have emotional dampening, a reduced response to emotionally meaningful stimuli. If emotional dampening reduces appraisal of threat, then it may also lower the assessment of risk. Lazarus' Transactional Model of Stress indicates that this assessment of risk is necessary to motivate coping behavior.

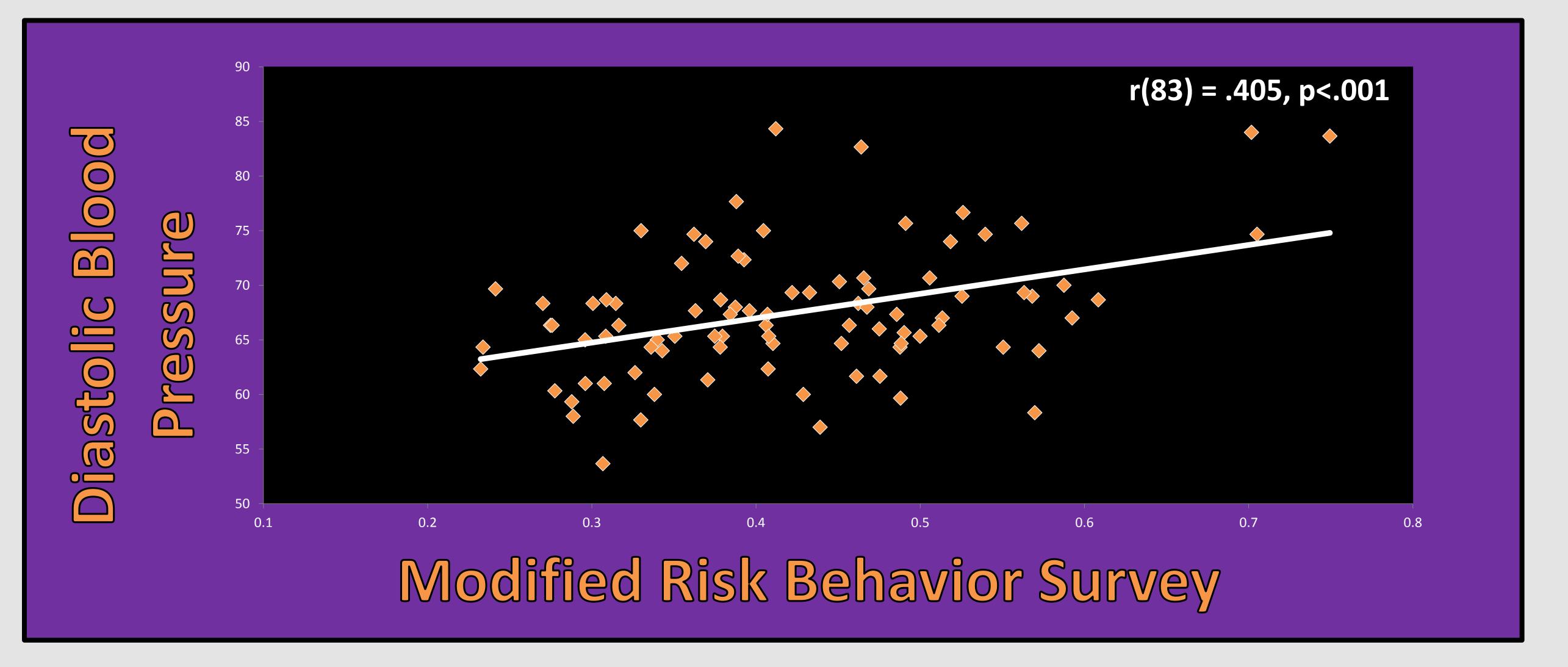
Emotional dampening of perceived threat could influence risk-related decision making. The present study examined the relationship between cardiovascular emotional dampening and risk behavior.

Methods

The participants consisted of 44 healthy, self-identified males and 44 healthy, self-identified females with an average age of 22.5 years. Resting diastolic blood pressure was measured using the GE Dinamap Pro 100v2. Emotion recognition was measured through separate faces and sentences tasks in which participants identified the emotion and the intensity of the emotion portrayed in each face and sentence. Risk behavior was measured through a modified Youth Risk Behavior Survey.

Results

Results showed a significant correlation between risk-taking behaviors and resting DBP [r(88) = .408, p < .001.] Sex was also correlated with resting DBP, [r(88) = -.230, p = .031] however, a multiple regression showed no main effects or interactions with sex in prediction of risk.



Discussion

The results indicate that young adults with higher diastolic blood pressure report more risk-taking behavior and show less accuracy in recognition of emotion in faces. These findings suggest that either the mechanisms which cause cardiovascular emotional dampening or the cardiovascular emotional dampening itself may reduce threat appraisal and increase high risk behavior. The effect of blood pressure on risk behavior in young adults could contribute to increased disease risk later in life. We recommend additional research to more fully examine the relationship between blood pressure, emotional dampening and risk behavior.

