Norepinephrine (NE), the main neurotransmitter released by the sympathetic system, works on many different adrenergic receptors. One of its roles is to prepare the body and the brain for the fight or flight response. The dysregulation of the cortical NE system is thought by some researchers to be associated with many psychiatric disorders, such as anxiety. Within the NE system, a2b adrenoceptors play a role in regulating the system by inhibiting NE release. One common variation in the ADRA2B gene (which codes for a2b adrenoceptors) is a deletion variant that has been shown to influence effects of emotion on attention and memory; however, the link between the ADRA2B gene deletion variant and trait levels of anxiety has not been investigated. The current study investigated the link between the ADRA2B deletion variant and trait anxiety.

668 participants were genotyped and completed questionnaires measuring trait anxiety and history of clinical anxiety. Trait anxiety scores were compared between carriers and non-carriers of the ADRA2B gene deletion in those who did and did not have a history of clinical anxiety. The results revealed that among those with no history of clinical anxiety, the deletion carriers had higher trait anxiety scores than the non-carriers. There was also marginal evidence that the relation between ADRA2B and trait anxiety was moderated by a history of clinical anxiety. This study indicates that the ADRA2B deletion variant predicts trait anxiety in healthy populations, and suggests that clinical anxiety potentially changes this relationship.

Themes:
Check (highlight) the most applicable theme according to the abstract.

| X Innovation and Technology | X Health and Wellness | Culture and Society | Sustainability and Conservation |

Comments:
Nicely written and clear what was done - where were participants recruited from – was it general population or for example people who were being seen by a psychologist or psychiatrist i.e. pre-test likelihood higher?

What was the prevalence of carriers?

Were the results statistically significantly different - any confounders/limitations?