

**Induced Anxiety States in 30-45 Year Old Females
and Males after Varying Levels of Caffeine
Ingestion**

Abstract

Females and Males from 30-45 years of age ingested 125 mg, 375 mg and 625 mg dosages of caffeine at three different sittings. Physiological responses measured by the electromyography (EMG) blood pressure, pulse, and respiration were noted on a pre and post basis. Utilizing the State-Trait Anxiety Scale (STAT) forms one and two, emotional reactions also were recorded on a pre and post basis. Also, the Taylor Manifest Anxiety Scale (MAS) was given. Age, height, weight and previous average daily caffeine ingestion habits were considered. An initial power analysis was conducted, i.e., a series of analysis of variances (ANOVAS) were performed to determine the specific reasonable number of subjects needed to gain significance. Next, a multivariate analysis of variance (MANOVA) was performed to detect significant values. Tukey A tests were completed to discriminate groups. Interpretation of the final data analyses indicated that varying levels of caffeine ingestion did induce temporary anxiety states in previously anxiety-free subjects. Both the STAT-form one and the EMG gave significant results at the 0.5 level. The portrait of individuals apparently experiencing emotional difficulties was evidenced, when, in fact, they were responding to the effect of the drug (caffeine) dosages.