THE EFFECT OF VERBAL AND VISUAL FEEDBACK ON TOLERANCE AND PERCEPTION OF PAIN


Objective: The purpose of this study is to investigate the effect of concomitant verbal and visual feedback on tolerance and perception of pain in a sample of college students. The researcher's specific aim was to distinguish a difference, if any, between an intervention strategy that incorporates motivating verbal and visual stimuli versus an intervention strategy that is non-motivating. Design and Setting: Nineteen participants completed a two-trial, cold pressor test, in a random crossover design. During the first trial, participants received either of the following: 1) verbal feedback with the intent to motivate (V₉IM) and visual replications of the (V₉IM) of the verbalized phrases or 2) insipid (non-motivating) verbal feedback (V₉NM) and visual replications (V₉NM) of the verbalized phrases. Trial two provided intervention reversal whereby those who received the verbal and visual feedback with the intent to motivate on the first trial received insipid verbal and visual feedback. Conversely, participants who received insipid verbal and visual feedback in trial one received verbal and visual feedback with the intent to motivate in trial two. During intent to motivate trials participants were read and visualized encouraging phrases. During the insipid verbal and visual feedback trials participants were read and visualized bland phrases from a college catalogue. Subjects: Eleven male and eight female college students with no history of cardiovascular, musculoskeletal, or hypothermic disorders, volunteered for this study. Measurements: Participants completed a categorical health status questionnaire for items related to perceived stress, quality of diet, and exercise frequency, duration, and intensity. Pain tolerance was measured in seconds (total time foot remains submerged) while pain perception was measured using a visual analog scale. Results: Two-way (group x time) repeated measures ANOVA revealed no significant effect of time on pain perception (p = .8199), no effect of condition on pain perception (p = .3178), and no significant condition by time interaction (p = .9989). As all subjects completed maximum tolerance time (6 minutes) under each condition, there was also no significant effect of condition on pain tolerance. Significant correlations were revealed for gender versus stress and gender versus exercise intensity. There were significant differences in pain perception male versus female. Conclusions: Neither motivating nor non-motivating stimuli influence pain perception or tolerance. Females report higher stress levels and lower exercise intensities versus males. Males exhibit lower pain perception scores versus females. Key Words: cold pressor test, pain perception, pain tolerance.