

## ABSTRACT

**Title:** The effect of height on perceived anxiety when overcoming a challenge obstacle

**Objectives:** The aim of this final thesis was to determine the immediate psychological response of overcoming the adrenaline barrier in the natural environment. In two cases. At first without the height aspect and then with this height aspect. Afterwards we had compared difference between measure of anxiety in these two cases. Then we had compared the difference in the level of anxiety between women and men.

**Methods:** The method of researching was standardized questionnaire CSAI -2, with 27 questions. Which targets three areas of anxiety – somatic, cognitive, self-confidence. We had a group of 34 respondents with 20 female and 14 male aged 20-26. They had to answer on this questionnaire just before they overcome the obstacle. First on the floor, and then up in eleven metres above the ground. Data was analyzed by statistic program R 4.1.2.

**Results:** Between the low and high logs, there was a significant increase in somatic anxiety ( $V = 43$ ,  $P_{adj} < 0.001$ ) and cognitive anxiety ( $V = 93$ ,  $P_{adj} = 0.002$ ), at the same time, there was a decrease in self-confidence ( $df = 33$ ,  $t = 4.06$ ,  $P_{adj} < 0.001$ ).

Anxiety levels between the low and high log are highly correlated for both somatic ( $\tau = 0.478$ ,  $z = 3.78$ ,  $P_{adj} < 0.001$ ) and cognitive anxiety ( $\tau = 0.481$ ,  $z = 3.83$ ,  $P_{adj} < 0.001$ ) and self-confidence ( $r = 0.701$ ,  $df = 32$ ,  $t = 5.56$ ,  $P_{adj} < 0.001$ ).

There are no differences in somatic anxiety between women and men on the low log ( $W = 184.00$ ,  $P_{adj} = 0.282$ ), nor on the high log ( $df = 32$ ,  $t = 2.06$ ,  $P_{adj} = 0.282$ ).

In cognitive anxiety, there are no differences between women and men on the low log ( $W = 167.50$ ,  $P_{adj} = 0.385$ ), nor on the high log ( $df = 32$ ,  $t = 1.14$ ,  $P_{adj} = 0.385$ ).

In terms of self-confidence, there are no differences between women and men on the low log ( $df = 32, t = -1.62, P_{adj} = 0.282$ ), nor on the high log ( $df = 32, t = -1.88, P_{adj} = 0.282$ ).

Women and men do not differ in the degree of the difference in the result on the low and high log neither for somatic anxiety ( $W = 176.50, P_{adj} = 0.370$ ), nor for cognitive anxiety ( $W = 144.50, P_{adj} = 0.888$ ), nor for the level of self-confidence ( $df = 32, t = -1.05, P_{adj} = 0.385$ ).

**Conclusion:** The study showed interesting results. Respondents were found to be more anxious when crossing a height log, while at the same time their self-confidence decreased. The measured values on both low and high logs are strongly correlated. However, the difference in anxiety tendencies between genders was not evident from the results. We would recommend performing the measurement on a larger sample file.

**Keywords:** Anxiety, stress, challenge, fear, outdoor, CSAI-2.