



# Correlation Between Physical and Psychosocial Findings in a Population of Temporomandibular Disorder Patients

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## Abstract

**Purpose:** To assess the correlation between RDC/TMD Axis I and Axis II diagnoses and whether pain could mediate a possible correlation between these two variables.

**Materials and methods:** Data of both RDC/TMD axes were collected from 737 consecutive patients who sought TMD advice at the University of Padova, Italy. A descriptive analysis was used to report the frequencies of Axis I and II diagnoses, and Spearman test was performed to assess the correlation between the axes. Subsequently, the sample was divided into two groups (painful vs nonpainful TMD). Frequencies were reported using descriptive analysis, and chi-square test was used to compare groups. The painful TMD group was then divided based on the level of pain-related impairment (low = Groups I and II; high = Groups III and IV). Then, frequencies of depression and somatization were reported using descriptive analysis for each disability group, and chi-square test was used to compare groups.

**Results:** No correlation levels were found between Axis I and any of the Axis II findings (Graded Chronic Pain Scale, depression, and somatization). The painful TMD group presented higher levels of depression and somatization ( $P < .05$ ). Comparisons of depression and somatization frequencies between pain-impairment groups showed a significantly higher prevalence of abnormal scores for the severe pain-impairment group.

**Conclusion:** There is no correlation between specific Axis I and Axis II findings. The presence of pain, independent of the muscle or joint location, is correlated with Axis II findings, and higher levels of pain-related impairment are associated with the most severe scores of depression and somatization.

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