

## عنوان مقاله:

Virtual Reality Videos and Their Effect on Adolescent Anxiety during Orthodontic Treatments: A Parallel Randomized Controlled Trial

## محل انتشار:

مجله میان رشته ای آموزش مجازی در علوم پزشکی، دوره 12، شماره 1 (سال: 1400)

تعداد صفحات اصل مقاله: 9

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## خلاصه مقاله:

**Background:** Fear of dental procedures is one of the main reasons why patients tend to avoid dental clinics. The present study aimed to investigate the effect of using Virtual Reality (VR) videos during dental treatments on anxiety levels of the adolescents receiving treatment in dental clinics. **Methods:** A total of 66 patients aged 12-15 years were referred to the dental clinic at the Orthodontic Department of Birjand University of Medical Sciences. The participants were randomly assigned to two groups ( $n=33$ ). The patients in the experimental group were engaged in watching a VR clip using a headset, while the control group directly observed the treatment procedure. Beck Anxiety Inventory (BAI) was administered to measure the participants' anxiety before and after the treatment. SPSS (Version 18) was used to analyze the data. **Results:** The results of Mann-Whitney U test revealed a statistically significant difference between the anxiety levels of the participants in experimental and control groups ( $P=0.014$ ). However, the results of Spearman Correlation test did not suggest any significant direct correlation between the participants' age and anxiety scores after the intervention in control ( $r=0.002$ ,  $P=0.992$ ) and experimental ( $r=0.2755$ ,  $P=0.122$ ) groups. Additionally,

the results of the MannWhitney U test indicated that there was no statistically significant difference between gender and anxiety scores after the intervention in the control ( $P=0.203$ ) and experimental ( $P=0.207$ ) groups. Conclusion: The results of the present study showed that the patients receiving VR distraction revealed lower anxiety caused by orthodontic procedures. This finding implies the effectiveness of the VR-based techniques to reduce anxiety during dental treatments.

### کلمات کلیدی:

Virtual Reality, Multimedia, Dental Anxiety, Orthodontics, children

### لینک ثابت مقاله در پایگاه سیویلیکا:

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