

## عنوان مقاله:

Evaluation of the Effects of Different Composite Types on the Shear Bond Strength: An in vitro Study

## محل انتشار:

مجله پژوهشی دانشجویی زیست پزشکی طبری، دوره 3، شماره 4 (سال: 1400)

تعداد صفحات اصل مقاله: 5

## نویسندگان:

Mahdi Shahrabi - *Department of Pediatric Dentistry, School of Dentistry, Tehran University of Medical Sciences, Tehran, Iran*

Behnam Seraj - *Department of Pediatric Dentistry, School of Dentistry, Tehran University of Medical Sciences, Tehran, Iran*

Shabnam Milani - *Department of Pediatric Dentistry, School of Dentistry, Tehran University of Medical Sciences, Tehran, Iran*

Seyde Fateme Rezaei Taleshi - *Student Research Committee, School of Dentistry, Mazandaran University of Medical Sciences, Sari, Iran*

Sara Yaghoubirad - *Department of Restorative Dentistry, School of Dentistry, Mazandaran University of Medical Sciences, Sari, Iran*

Zahra Ebrahimi - *Dentist, Tehran, Iran*

## خلاصه مقاله:

**Introduction:** The aim of this in vitro study was to determine and compare the shear bond strength (SBS) of two types of composites. **Material and Methods:** Twenty cylindrical samples were prepared and divided into two control and case groups. The case group consisted of 10 cylindrical samples of two types of composites (3M and Vivadent), and the control group, which was divided into two subgroups of 5, included only one type of composite (3M or Vivadent). After preparation, the samples were transferred to the Instron device for testing the SBS. The data were analyzed by SPSS version 15 software using Smirnov-Kolmogorov test for studying the normal distribution of data and t-student test for independent populations. **Results:** Heliomolar (Ivoclar-Vivadent) composite (microfill) showed the lowest SBS, but the difference was not significant ( $P>0.05$ ). The highest SBS was for Filtek Z100 (3M ESPE) composite. There were no fracture lines in the interface of the two composites. **Conclusion:** This confirms that proper use of adhesives can prevent fracture in the interface of different composites. So, using two different composite brands on each other does not reduce the bond strength between them.

## کلمات کلیدی:

Composite resins, Dentistry, Shear bond strength

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1838276>

