

Author: [ADVANCED](#)

Volume Page

Keyword: [TOP](#) > [Available Issues](#) > [Table of Contents](#) > [Abstract](#)

ONLINE ISSN : 1881-1361

PRINT ISSN : 0287-4547

Dental Materials Journal

Vol. 26 (2007) , No. 4 p.589-597

[\[PDF \(498K\)\]](#) [\[References\]](#)**Twenty-four Hour Flexural and Shear Bond Strengths of Flowable Light-cured Composites: A comparison Analysis Using Weibull Statistics**[Rosalina TJANDRAWINATA](#)¹⁾, [Masao IRIE](#)²⁾ and [Kazuomi SUZUKI](#)²⁾³⁾

1) Department of Dental Materials, Faculty of Dentistry, Trisakti University, Campus B

2) Department of Biomaterials, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Science

3) Research Center for Biomedical Engineering, Okayama University

(Received January 25, 2007)

(Accepted February 26, 2007)

Abstract:

By means of Weibull analysis, this study evaluated and compared the flexural strength and shear bond strength of flowable light-cured composites against those of conventional ones. Twenty specimens of each material were prepared for flexural and shear bond strength measurements. Specimens were measured after water storage at 37°C for 24 hours. Three of four flowable composites showed significantly higher flexural strength than conventional ones, with Weibull moduli ranging between 6 and 14. With the presence of a bonding agent, the shear bond strength to enamel of both types was not different significantly ($p=0.28$), with Weibull moduli ranging between 4 and 9. In the selection of an excellent resin composite material, results of this study showed that a high, stable Weibull modulus value could be a sound indicator.

Key words:[Flowable composites](#), [Mechanical strength](#), [Weibull analysis](#)[\[PDF \(498K\)\]](#) [\[References\]](#)Download Meta of Article [\[Help\]](#)

To cite this article:

Rosalina TJANDRAWINATA, Masao IRIE and Kazuomi SUZUKI. Twenty-four Hour Flexural and Shear Bond Strengths of Flowable Light-cured Composites: A comparison Analysis Using Weibull Statistics . Dent. Mater. J. 2007; 26: 589-597 .

doi:10.4012/dmj.26.589

JOI JST.JSTAGE/dmj/26.589

Copyright (c) 2009 The Japanese Society for Dental Materials and Devices



[Japan Science and Technology Information Aggregator, Electronic](#)

