

# **The Effect of Dynamic Fatigue Forces on Retentivity of Different Designs of Resin Bonded Fixed Partial Dentures**

Thesis

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

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# تأثير قوى الإجهاد الحركى على قوة استبقاء تصميمات مختلفة من الأطقم الجزئية المثبتة المربوطة بالراتنج

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## **Aim of the study**

**This study was designed to :**

١. Evaluate the effect of dynamic fatigue on retention of the following resin-bonded bridge designs:
  - a. Functionally-Split design (Two-part design with stress director and hollow-pontic).
  - b. Fixed-supported design.
  - c. Cantilever design.
  - d. Conventional fixed-fixed design(Traditional one piece design).
٢. Evaluate the effect of tooth preparation with proximal grooves on the retentivity of the previously mentioned designs.
٣. Characterization of the failure pattern of various suggested bridge designs.
٤. Assessment of the clinical performance of the suggested designs.