

# THE EFFECT OF NEW BONDING AGENT ON THE SHADE OF TWO TYPES OF PORCELAIN

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Color matching and accurate shade selection are problems common to most dental restorations. The replication of the form and color of natural teeth in dental porcelain remains an art, rather than a science.

Two types of commercially available porcelain (Vital Luxor porcelain) and one type of metal substrate were used in this study to evaluate the effect of a new bonding agent on the shade of two types of porcelain.

60 specimens of metal discs received the same surface treatment prior to application of bonding agent and porcelain build-up. The metal were divided into two groups (G I, Vita P. and G II, Luxor P.)

Group I (Vita P.) was subdivided into subgroups A, B, and C. Each of 10 specimens.

Subgroup A received two coats of bonding agent, followed by one application of opaque with a total thickness of 1 mm. Subgroup B received one coating of bonding agent and two applications of opaque with a total thickness of 1 mm. Subgroup C received no binding agent, but two applications of opaque layers and is considered as a control group. The opaque metal sample was placed inside the aluminum mould after changing the plunger for standardization of porcelain thickness of 2 mm. All the samples were separated from the mould and fired under standard conditions in a calibrated furnace. Each sample received two firings to standardize the 2 mm thickness.

It is recommended to use a minimum opaque thickness (one coat layer) in such a case. The technician has to use opaque slightly darker than recommended by the manufacturer. Also, there was no difference between Vita and Luxor porcelain.