

## CHAPTER VI

### CONCLUSION

This study was designed to compare the shear bond strength among chemically, visible light and dual cured composite resins. The sites of bond failures were also appraised.

The following conclusions were made:

1. The mean shear bond strengths of chemically, visible light and two dual cured composite resins (Sequence and Enlight) were 99.85, 112.85, 96.19 and 94.98 newtons respectively.

2. The visible light cured composite resin showed a significantly greater bond strength than the other composite resins ( $p < 0.05$ ).

3. The failure modes of the chemically, visible light cured composite resins were adhesive failure at bracket-composite, 40% and 42% respectively, and bracket-composite interface, 40% and 50% respectively. The dual cured composite resins, Sequence and Enlight, predominantly underwent adhesive failure at enamel-composite interface, 81% and 83% respectively. The chemically cured composite resin showed the highest cohesive failure (20%).