Abstract: Aim:
The aim of this review is to provide an understanding of the types of light curing modes and their applications.

Abstract:
Different modes of light curing have been introduced to affect the shrinkage of resin composites. "Normal mode" is the continuous emission of light with the intensity of at least 400 mW/cm². An exposure time of 40 seconds is needed to cure a 2-mm layer of composite. "Low mode" is a lower output, recommended for polymerization of thin layers of materials such as dentin bonding agents which may help to limit stresses created during the setting of the material and generates less heat. “Step mode” emits a low power output for about 10s, which then suddenly increases to maximum output for the rest of the curing cycle. This is to initiate polymerization slowly and give additional time for the material to deform plastically relieving stress generated by the shrinkage. "Ramp mode" is a variation of the step mode. In ramp curing the unit emits a low power output for about 10s, which then increases in a gradual linear manner to maximum output for the rest of the curing cycle. "Pulse mode" is another technique that the power output may be switched on and off for various intervals through the curing cycle or the output alternates continuously between high and low outputs.

Conclusion:
There are different light-curing modes and understanding the nature of them is important for achieving optimal curing of resin composites.

Composite Resins, Composite Resins/radiation effects, Curing Lights, Dental Materials/radiation effects, Polymers/radiation effects

Presentation: Poster