Objectives: The purpose of this study was to evaluate the effect of different polishing procedures on color stability of nanohybrid (Clearfil Majesty Esthetic, Kuraray), nanofil (Filtek Ultimate, 3M ESPE), and microhybrid (G-aenial, GC) composite resins. Materials and Methods: A total of 120 composite resin discs, 40 from each material, 8 mm in diameter and 2 mm in thickness were polymerized under Mylar matrix (Optilux 501, Kerr). Surface finish of the specimens was accomplished with tungsten carbide burs and then each composite resin group was randomly divided into four subgroups (n=10) according to the polishing procedure: 1) Sof-Lex (3M ESPE), 2) Sof-Lex + Diamond polish (Ultradent), 3) PoGo (Dentsply), 4) PoGo + Diamond polish. Following storage in artificial saliva for 24 h at 37°C, initial color measurements were performed with a spectrophotometer (CM-2600d, Konica Minolta). Then the specimens were immersed in tea with the staining cycle being repeated for 14 days. Color differences (ΔE) were then evaluated. Data were analyzed using one-way ANOVA and post hoc Tukey's tests (p<0.05). Results: All the test composite resins showed statistically significant changes in ΔE during the 14-day period (p<0.05), which was greater than the clinically acceptable value of 3.3. When the same polishing procedures were compared, Clearfil Majesty Esthetic showed less color change than Filtek Ultimate (p<0.05). The differences between Filtek Ultimate, G-aenial, and Clearfil Majesty Esthetic compared to G-aenial were not significant (p>0.05). Except for the G-aenial/PoGo group, combination of the polishing system with a polishing paste showed significantly less color change than the polishing system alone (p<0.05). Conclusions: The type of composite resin and polishing procedure affect color stability. Clinical Significance: The use of a diamond polishing paste in combination with polishing system can be beneficial in reducing discoloration of nanohybrid, nanofil, and microhybrid composite resins.