Overall, shoaling cohesion was lower in barbel (0.74 ± 0.22) when compared to the bleak (0.93 ± 0.15) ([**Figure 4**](https://www.mdpi.com/2410-3888/8/9/462#fig_body_display_fishes-08-00462-f004)). The barbel showed significant differences in shoal cohesion among treatments (χ2 = 7.185, df = 2, *p* = 0.028), specifically between the control (0.813 ± 0.207) and both low (0.705 ± 0.213; *p* < 0.01, Dunn post hoc) and high esfenvalerate concentrations (0.711 ± 0.211; *p* = 0.014, Dunn post hoc). For the bleak, there were no significant differences in shoal cohesion between the control (0.938 ± 0.142), low (0.958 ± 0.104), and high (0.896 ± 0.184) concentrations (χ2 = 3.493, df = 2, *p* = 0.174).