Single layer transition metal dichalcogenides are 2D semiconducting systems with unique electronic band structure. Two-valley energy bands along with strong spin-orbital coupling lead to valley dependent career spin polarization, which is the basis for recently proposed valleytronic applications. These systems also exhibit unusually strong many body affects, such as strong exciton and trion binding, due to reduced dielectric screening of Coulomb interactions. Recently observed large photoluminescence helicity suggests beyond ns hole spin and valley lifetimes. But there is not much known about the impact of strong many particle correlations on spin and valley polarization dynamics. In this talk I will present direct measurements of ultrafast valley specific relaxation dynamics in single layer WS\textsubscript{2} and MoS\textsubscript{2}. We found that excitonic many body interactions significantly contribute to the relaxation process. Biexciton formation reveals hole valley/spin relaxation time in MoS\textsubscript{2}. Our results suggest that initial fast intervalley electron scattering and electron spin relaxation leads to loss of valley polarization for holes.