Fish age estimations are instrumental for understanding fish population dynamics such as age structure and mortality, and thus play an important role in management of fisheries as well as the conservation of rare and endangered fish populations. Ages are estimated most often from readings of various calcified structures. Readings are taken either multiple times by one individual (within-reader) or one time by multiple individuals (between-reader). Precision, or consistency of these readings, is most often measured by the average coefficient of variation (ACV). In this study, we ascertain the effects of independent variables such as the calcified structure examined, the number of readings, and type of reading (between- or within-reader) on the relationship between the maximum age of readings taken and the ACV value with data collected from over 400 publications spanning more than 30 years. (IVR results will be summarized here)