The present study intended to compare the voice onset time (VOT) of Persian and English bilinguals in plosives. By bilingual we mean a person who speaks, reads, or understand two languages equally well, but a bilingual person usually has a better knowledge of one language than of the other. For each language six words having six different plosive consonants at the initial position were used. A set of 20 words (10 Persian and 10 English) containing other consonants was selected and mixed with the plosive sets to reduce the experimental bias. Thirty female students majoring in translation at the BA level and nine students majoring in Teaching English as a Foreign Language at the MA level were randomly selected from among the students of Khorasgan Azad University. The results were analyzed through descriptive statistics and the analysis of variance. The results indicated similarities between the performance of MA and BA groups with regard to the place of articulation. The differences between the VOTs of L1 and L2 in the MA group were greater than the differences between L1 and L2 VOTs of the BA group. The results revealed that MA students seem to produce English plosives differently from the L1 plosives in comparison with the BA group. This can be attributed to the proficiency level of the students at the MA level.