We present the results of quantum dynamics studies of photodissociation of BrCN following electronic excitation to states that dissociate to Br$^{-}$ + CN and Br* + CN$^{-}$. The electronic structure of BrCN was evaluated with MRCI-SO/aug-cc-pVTZ at a fixed CN distance of 1.18 Å. The calculations were used to evaluate the two-dimensional potential surfaces for the ground and excited states as functions of the Br-CN(center of mass) distances, R, and angles, $\theta$, between CN and R. A diabatic model developed for the two relevant excited states shows a dramatic change in the electronic character of the states near the BrCN$^{-}$ geometry when $\theta \leq \pi/2$. The quantum dynamics studies on the bare BrCN$^{-}$ were carried out by exciting wave packets of six vibrational states of BrCN$^{-}$ that are thermally populated at 150K onto each of the two excited states. Upon excitations of the wave packets onto the state accessible in the visible region, 51% Br$^{-}$ and 49% CN$^{-}$ photoproducts were calculated. Similar calculations in the UV region yielded 56% Br$^{-}$ and 44% CN$^{-}$ photoproducts. Experimentally, when BrCN$^{-}$ is excited in the visible region, 60% Br$^{-}$ and 40% CN$^{-}$ photoproducts are obtained while 80% Br$^{-}$ and 20% CN$^{-}$ yields were obtained in the UV region. Further dynamics studies of BrCN$^{-}$ solvated in argon will be carried out with varying Ar$_n$(BrCN$^{-}$) cluster sizes.