We investigate the unpolarized pion and kaon fragmentation functions using the nonlocal chiral quark model. In this model the interactions between the quarks and pseudoscalar mesons is manifested nonlocally. In addition, the explicit flavor SU(3) symmetry breaking effect is taken into account in terms of the current quark masses. The results of our model are evaluated to higher $Q^2$ value $Q^2 = 4$ GeV$^2$ by the DGLAP evolution. Then we compare them with the empirical parametrizations (HKNS and DSS). We find that our results are in relatively good agreement with the empirical parametrizations and the other theoretical estimations.

[1] Dong-Jing Yang, Fu-Jiun Jiang, Chung-Wen Kao, and Seung-il Nam, to be published in Physical Review D.