Characterizations of Finite Groups with $p$-fusion of Squarefree Type.

For $G$ a finite group and $p$ a prime, we discuss two theorems under hypotheses that restrict the index of the subgroup generated by every $p$-element $x$ in certain subgroups generated by pairs of its conjugates. Under one set of hypotheses, $G$ is shown to be supersolvable. Simple groups satisfying a complementary fusion-theoretic hypothesis are classified as well. (Received September 08, 2014)