Let $P$ be a finite group and denote by $\omega(P)$ the set of its element orders. $P$ is called $k$-recognizable by the set of its element orders if there are $k$ isomorphic classes of finite groups $G$ with the property $\omega(G) = \omega(P)$. Usually a 1-recognizable group is called a recognizable group.

In this research we will consider the recognition property of the simple groups $PSL_p(3)$ and $PSL_{p+1}(3)$, where $p$ is an odd prime number. Under this condition the mentioned groups have disconnected prime graphs, hence a theorem of Gruenberg and Kegel can be applied to find the structure of the group $G$. In particular we will show that the group $PSL_7(3)$ is 2-recognizable and $PSL_8(3)$ is a recognizable group. (Received August 02, 2007)