1114-20-118 **Mark L. Lewis*** (lewis@math.kent.edu), Department of Mathematical Sciences, Kent State University, Kent, OH 44242. *Variations on average character degrees and p-nilpotence.*

We prove that if p is an odd prime, G is a solvable group, and the average value of the irreducible characters of G whose degrees are not divisible by p is strictly less than $2(p+1)/(p+3)$, then G is p-nilpotent. We show that there are examples that are not p-nilpotent where this bound is met for every prime p. We then prove a number of variations of this result. (Received August 18, 2015)