Let $k$ be an even integer such that $k$ is at least 2. We give a (natural) density result to show that for almost all $d$ at least 2, the equation $(x + 1)^k + (x + 2)^k + \ldots + (x + d)^k = y^n$ with $n$ at least 2, has no integer solutions $(x, y, n)$. The proof relies upon some Galois theory and group theory, whereby we deduce some interesting properties of the Bernoulli polynomials. This is joint work with Samir Siksek (University of Warwick).